Drug & Cosmetic INDUSTRY

July 1947

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FOR THAT *Finishing Touch*

IN Face Powders

Some call it "bloom", others a "peachy" texture, but all agree that SNOW TOP USP Precipitated Calcium Carbonate imparts to face powders an elusive quality that is ringing up new sales highs for many leading cosmetic houses.

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New England
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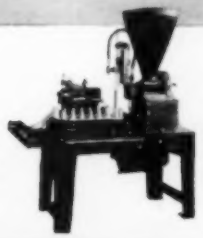
TUBES

If your tube filling facilities are inadequate, ship us your bulk product. We'll package it for you in tubes, jars or tins, ready for distribution. This is only ONE of the EXTRA services available at NEW ENGLAND!



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Drug & Cosmetic INDUSTRY

JULY 1947

CONTENTS

KEEPING POSTED	25
HOW TO START A COSMETIC BUSINESS	30
ADMA	32
FUTURE OF AMERICAN DRUG AND CHEMICAL INDUSTRY	36
CONTROL PROCEDURES	38
FROSTBITE	41
MAKE-UP BASES	44
PACKAGING AND SELLING	47
NEWS	67
PRODUCTION FORUM	79
YOUR TRADE-MARK RECORD	92
PATENT TRENDS AND THOUGHTS	96
INDUSTRY'S BOOKS	99
COMPOUNDER'S CORNER	100
ADVANCING THERAPY	104
READER'S QUESTIONS	107
PERFUMER'S SHELF	108
PURCHASING DEPARTMENT	111

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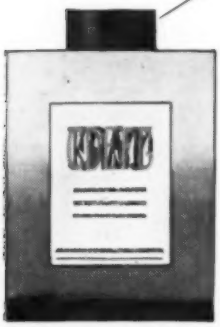
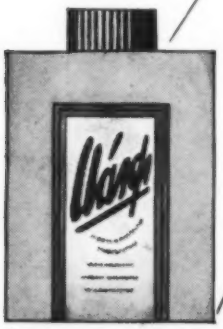
The EYE can stop the impulse to buy



Women hesitate to buy a product that has "settled out" and therefore has an appearance of poor quality.



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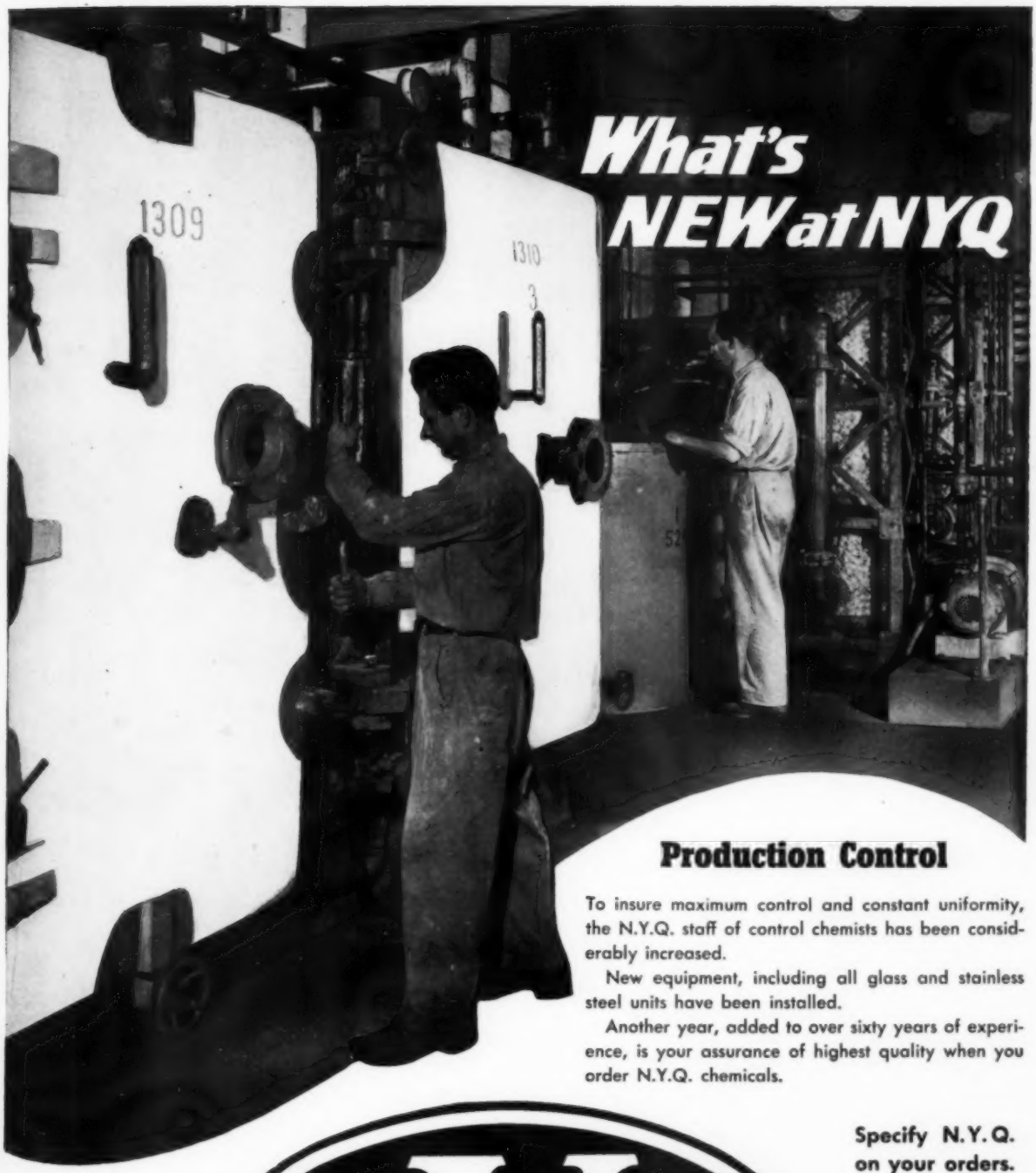

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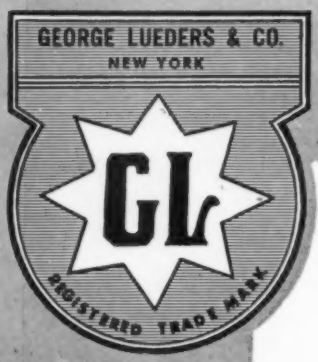

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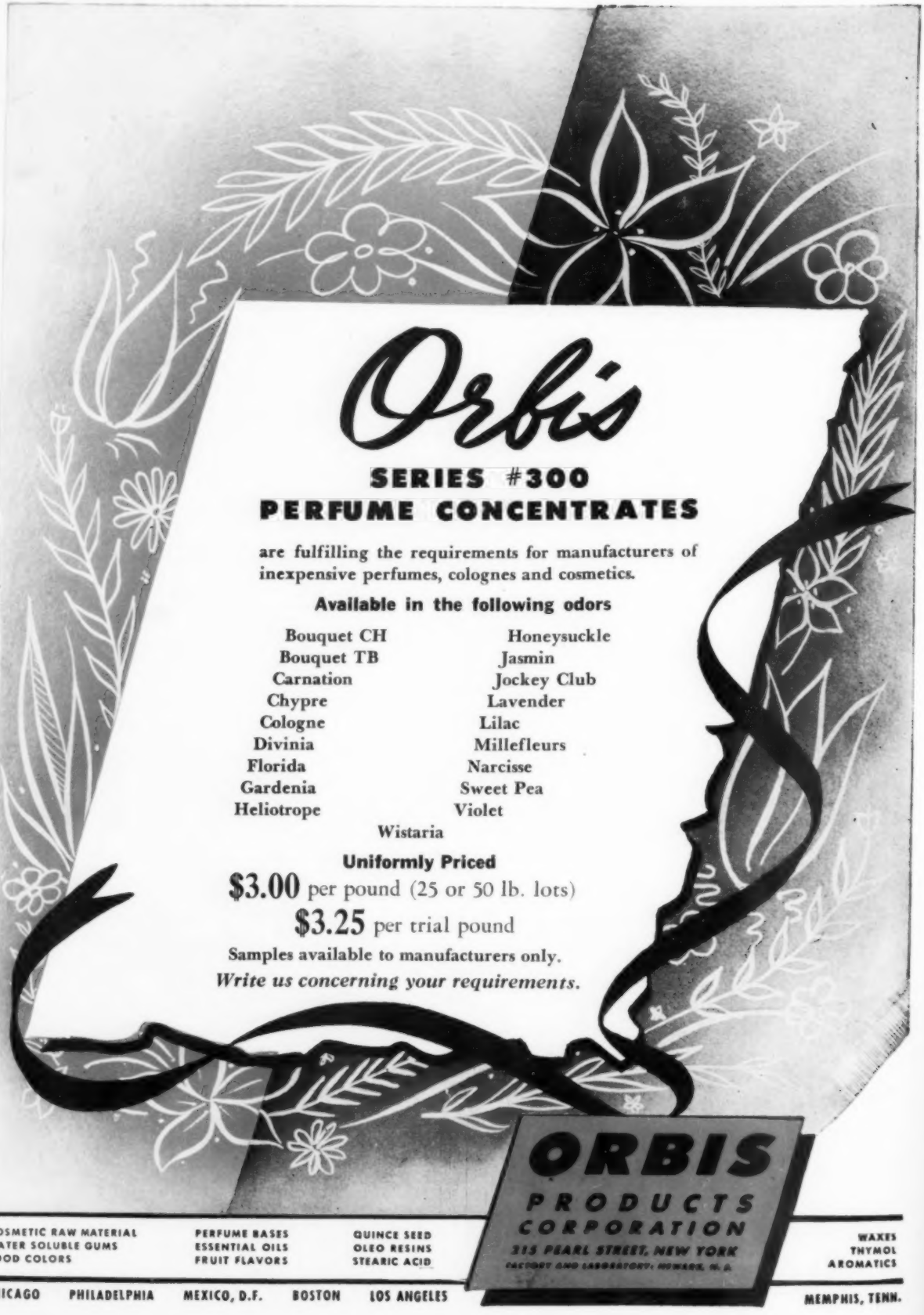

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MANUFACTURERS OF PERFUMES, AROMATIC CHEMICALS, ESSENTIAL OILS AND FLAVORS

a statement of polic

apropos of present price levels of aromatics and perfume materials

WE ARE DEEPLY CONSCIOUS of present price levels as affecting the perfume, cosmetic and soap industries, and completely sympathetic with the necessity of adjusting this factor as conditions permit.

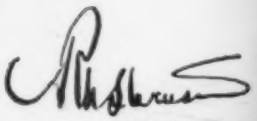
AT THE ONSET OF WORLD WAR II, we established the definite policy that we would maintain existing prices of our products insofar as that was possible, making adjustments only to correspond to extreme increases in the costs of our raw materials. Our record in this regard speaks for itself.

IN CONNECTION WITH PRODUCTS made from strictly domestic raw materials, this was not a serious problem, but in the case of derivatives of essential oils originating from abroad, it is a matter of history that prices advanced to extraordinarily high levels, and rather than withdraw from production of these products, it was necessary, in order to serve our clients, that our prices be adjusted in accordance with actual costs.

COMPARISON OF EXISTING PRICES of the straight aromatics (from domestic raw materials) indicates that in general any price increases since 1939 have not exceeded ten to fifteen per cent. In keeping with all industry, it was necessary that we increase our direct labor costs, and the higher level of wages in general was naturally reflected in the costs of the raw materials we bought.

WE ARE HAPPY TO SAY that the progressive declines in the cost of most of the imported raw materials we use have permitted us to reduce our selling prices accordingly, and we pledge ourselves to follow this trend as costs will allow.

WE FULLY REALIZE THE IMPORTANCE to the industries we serve of reducing the costs of all the raw materials they buy, so that their sales prices can be adjusted to the change in economic levels and buying psychology, and we pledge ourselves to do our utmost, in all the products we sell, without sacrificing the high standard of Givaudan quality, to keep prices at a minimum, reflecting both any decreases in raw materials and increase in efficiency of production brought about by the return of more normal conditions.



Sales Manager

...backed by quality standards

The statement of policy on the opposite page takes on added significance from the fact that wherever aromatics are used, the name of Givaudan has become synonymous with outstanding quality and fineness of fragrance.

Today, more than at any time during recent years, the quality standards of Givaudan's aromatics and perfume oils are essential to the maintenance and furtherance of your business.

As your requirements become increasingly exacting, you can look to Givaudan for good counsel and practical assistance in the solution of your aromatic and perfuming problems.

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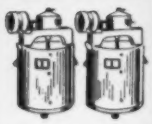

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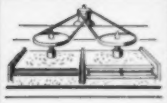
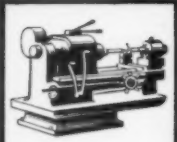


Flotation



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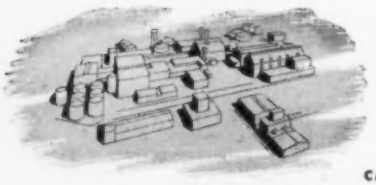
Iodine Value	90—93	91—95
Sap Value	195—199	195—199
Unsap (max.)	3.0%	3.0%

Special Grades

	0-20 White Elaine	0-21 Low-Titre White Elaine
Titre	8—11° C.	3—5° C.
Color (Lovibond)	15Y—1.5 Red, 5¼"	15Y—1.5 Red, 5¼"
Iodine Value	90—93	91—95
Sap Value	197—201	197—201
Unsap (max.)	2.0%	2.0%

*Elaine is the trade mark for all Emery Oleic Acids



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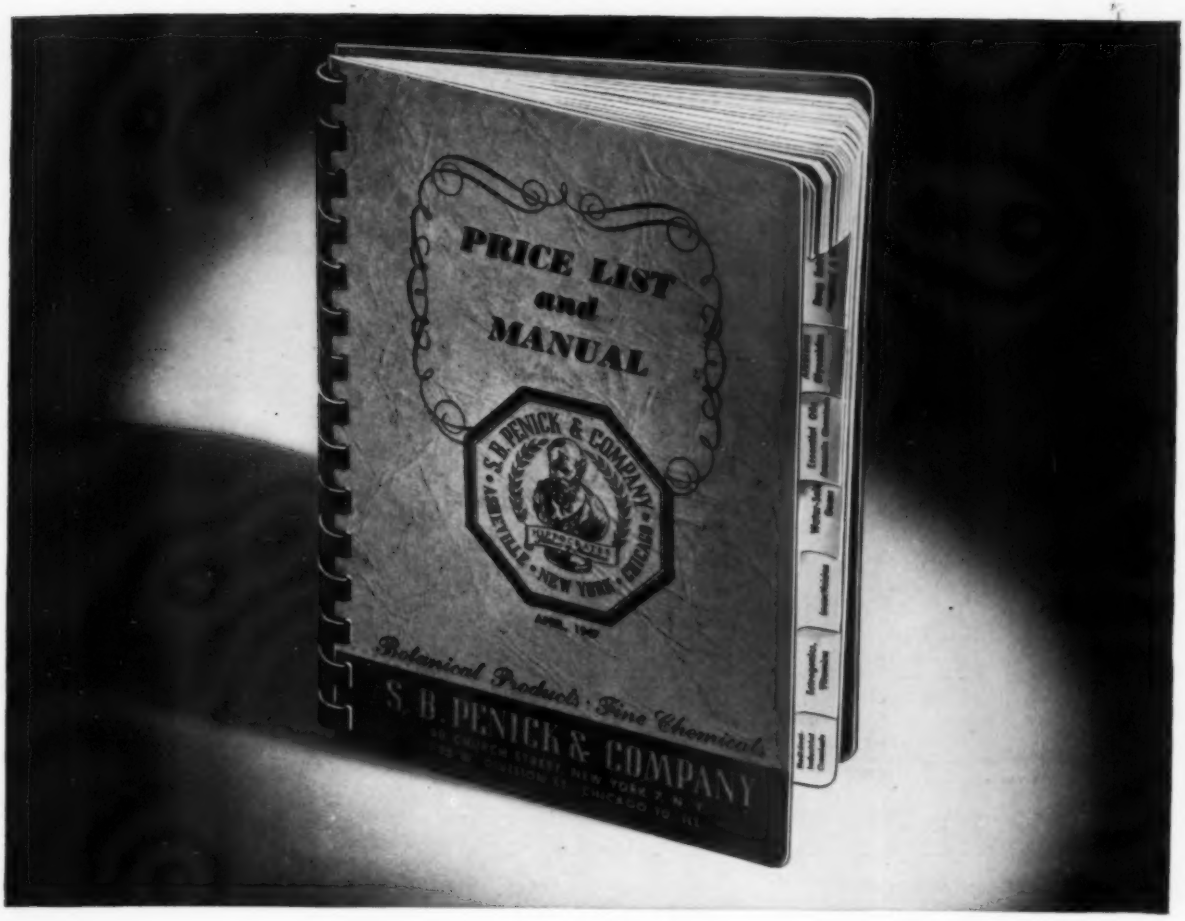

New Price List and Manual

¶ We take pleasure in announcing the publication of our new Price List and Manual, cataloguing the nearly 4,000 products which comprise our full line. ¶ Divided into departmental sections and alphabetically indexed for convenient reference, the new Manual is designed to be of maximum assistance to purchasing departments and to research and scientific divisions. ¶ Companies using Botanicals and their derivatives, Extracts, Alkaloids, Essential Oils, Flavors, Perfume Bases, Insecticides, Chemicals, Water Soluble Gums, etc. are cordially invited to write us.

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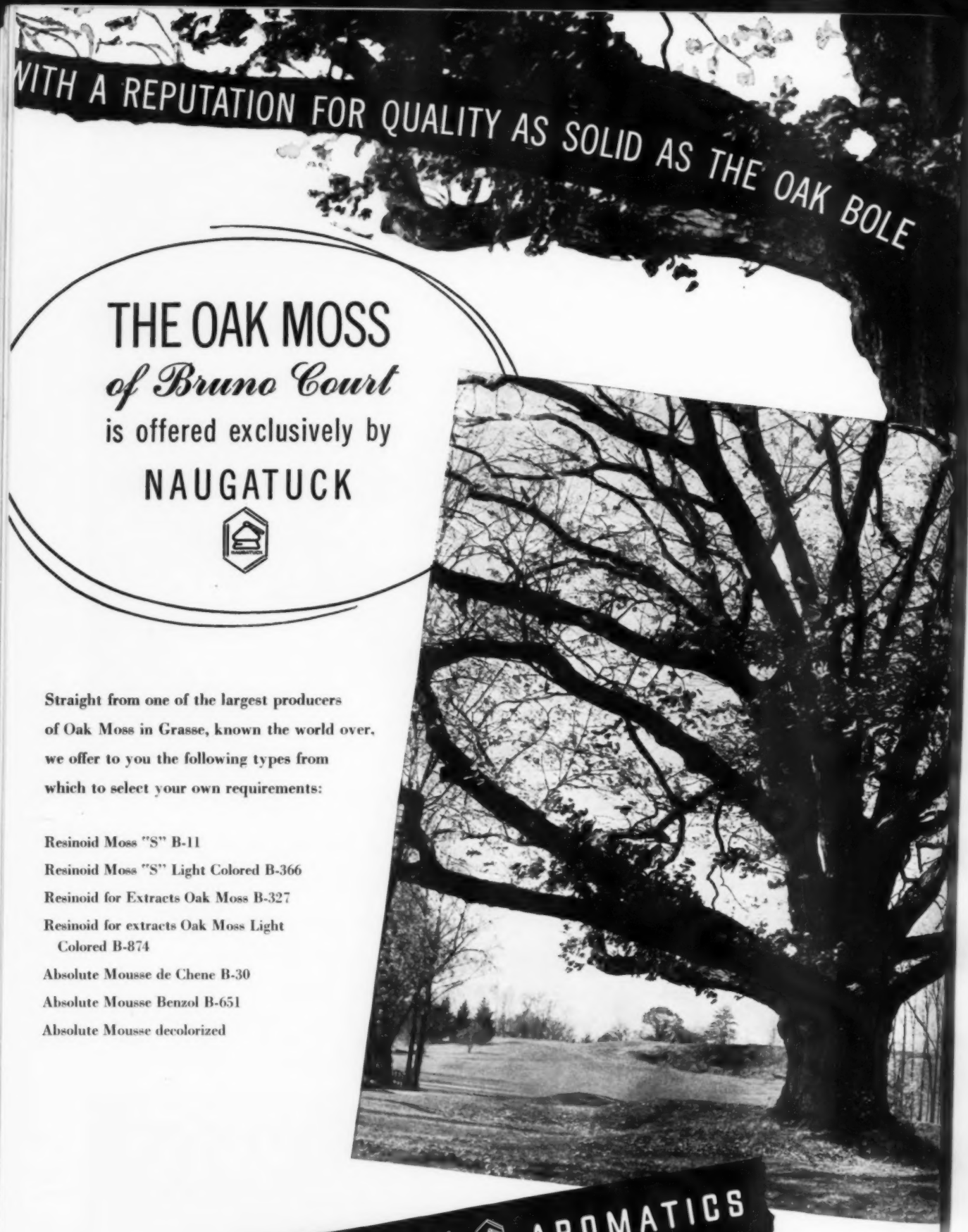

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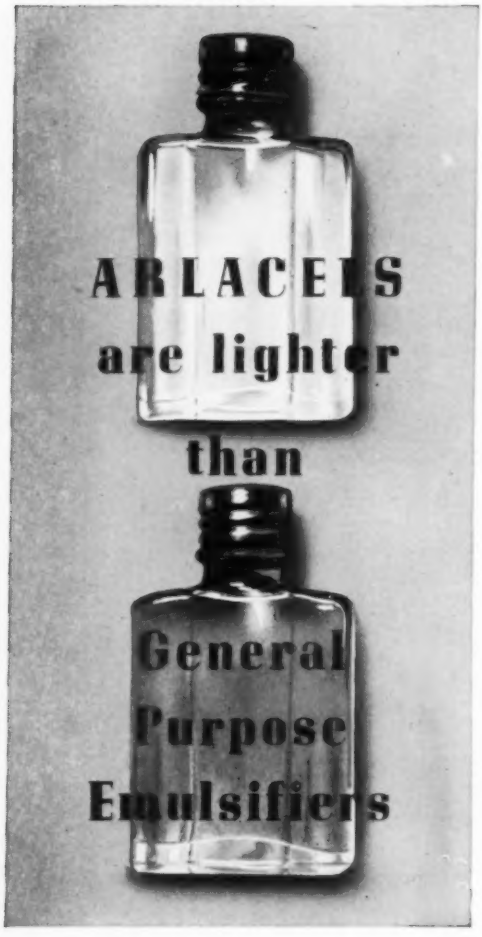

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Compare a general-purpose emulsifier with an ARLACEL emulsifier made especially for cosmetic and pharmaceutical formulations.

Compare them for lack of color and odor—for heat stability—and see for yourself why the new ARLACELS are outstandingly superior for this exacting field of use.

The new ARLACELS are non-ionic, make emulsions which are stable to freezing and electrolytes. They are dispersible in water and soluble in most organic solvents.

But why not let your laboratory check into these details more thoroughly? Atlas emulsion specialists will be glad to consult with you on how ARLACELS can help. Or we will send you our book "Drug and Cosmetic Emulsions" showing examples of ARLACELS in popular formulae.

ATLAS

INDUSTRIAL CHEMICALS DEPARTMENT

CHEMICALS ATLAS EXPLOSIVES

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ARLACEL 40	Sorbitan monopalmitate
ARLACEL 60	Sorbitan monostearate
ARLACEL 80	Sorbitan monooleate
ARLACEL 83	Sorbitan sesquioleate
ARLACEL 85	Sorbitan trioleate

ARLACEL: Reg. U. S. Pat. Off.

ATLAS POWDER COMPANY, WILMINGTON 99, DELAWARE • OFFICES IN PRINCIPAL CITIES • CABLE ADDRESS • ATPOWCO

...for cosmetics only

created by the one and only thomasset

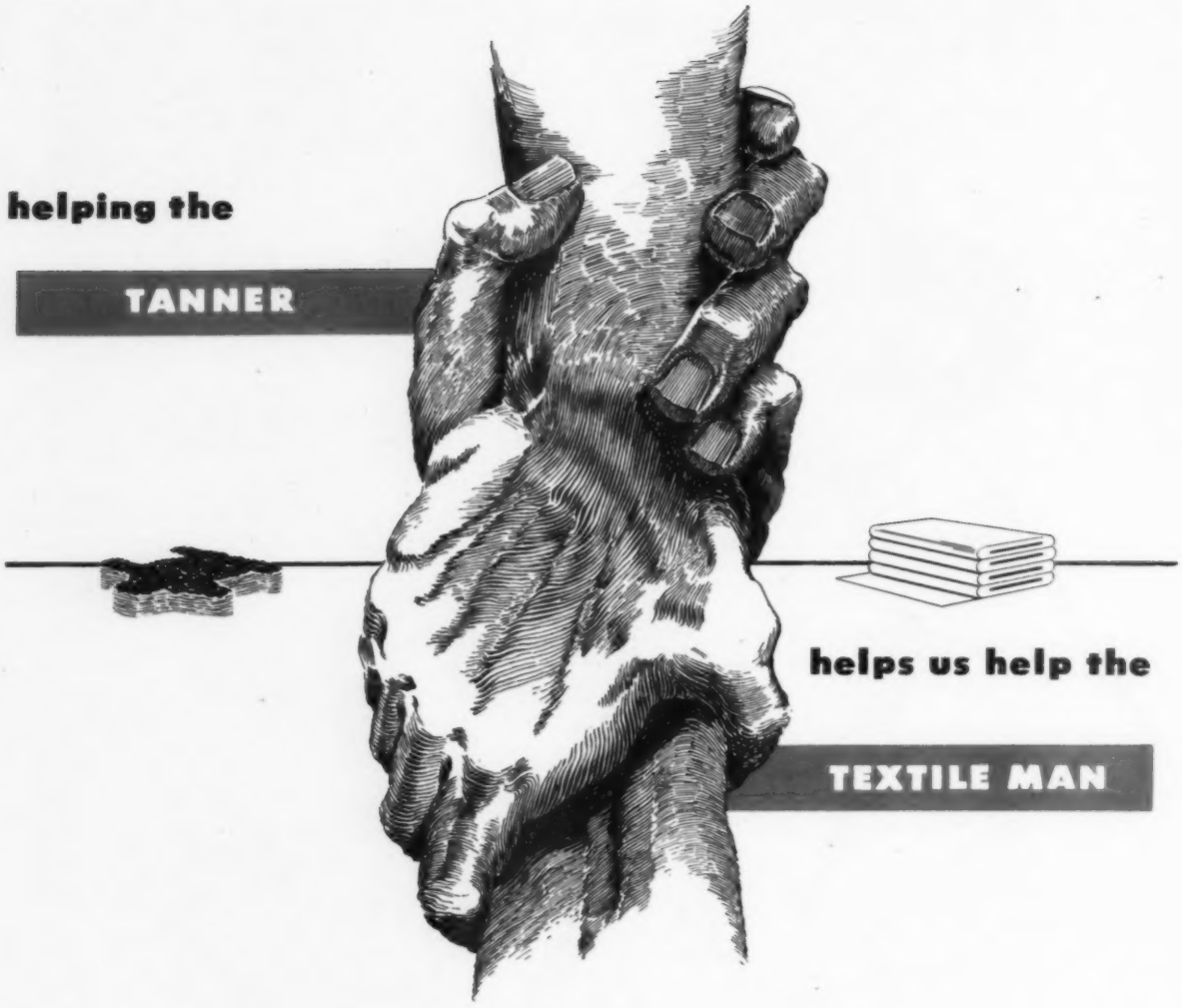
paul thomasset is a name to conjure with in the creation of cosmetic colors for cosmetic houses • has been since the very origin of organic lake chemistry • thomasset colors are all clear and true • all true to your order the first time, the nth time . . . through thomasset control • the color here, fiery yet firm, dynamic yet mild, only part of the spectrum translated by thomasset and thomasset alone, is d & c red #3 . . . regal red

thomasset colors

Whittaker, Clark and Daniels • INC., NEW YORK

helping the

TANNER



helps us help the

TEXTILE MAN

Whittaker minerals, colors, pigments, serve countless industries in countless ways. In serving each, Whittaker gains perspective the better to serve all.

This diversified yet complete experience is an extra you receive from Whittaker. It is tangible in Whittaker's service, which goes far beyond the supplying of quality products to exact specifications. It is your assurance that Whittaker products will bring satisfaction complete.

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...and you

ALBATEX • ALUMINUM SILICATE • BARIUM SULFATE • BENTONITE • CALCIUM CARBONATE • CALCIUM HYDROXIDE • CALCIUM OXIDE • CHALK (PRECIPITATED) • CERTIFIED COLORS (D & C) • COSMETIC ZINC STEARATE • DIATOMACEOUS EARTH • FULLER'S EARTH • GYPSUM • HYDRO-MAGMA PASTE • KAOLIN (COLLOIDAL) KIESELGUHR • MAGNESIA • MAGNESIUM CARBONATE • MAGNESIUM HYDROXIDE • LO-MICRON MAGNESIUM SILICATE • LO-MICRON OXIDE COLORS • POWDER BASE • PYROPHYLLITE • RICE STARCH • STEARATES TALC—IMPORTED AND DOMESTIC • TITANIUM DIOXIDE—PURIFIED • USP TALC • WHITING • ZINC OXIDE

EST. WHITTAKER 1890

MINERALS COLORS

PIGMENTS

ROSES by

RED ROSE "Sch. & Co."

The classic rose base to
give your perfume the
body and character of the
genuine full-blown rose!

schimmel & co., inc. 601 west 26th street new york 1, n. y.

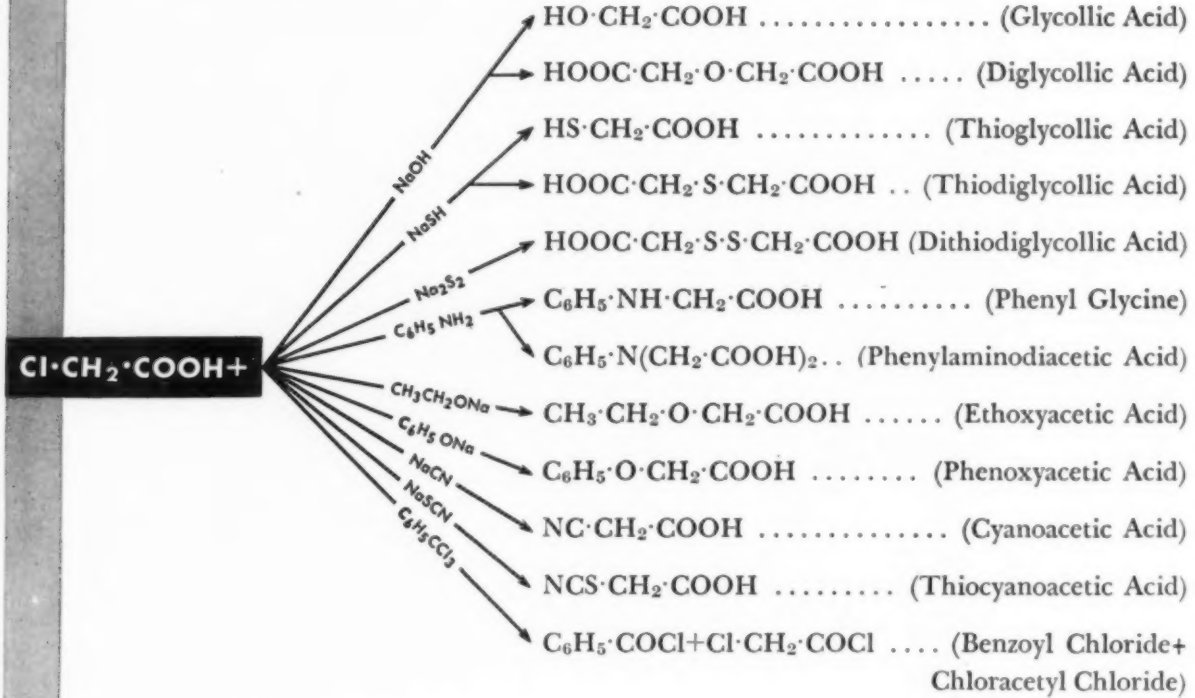
MONOCHLORACETIC ACID

NOW *manufactured by*

HOOKER

Hooker is now in production of Monochloracetic Acid. This important and versatile industrial chemical is being produced as both technical and high grade material.

SOME TYPICAL REACTIONS OF MONOCHLORACETIC ACID



➡ Write on your business letterhead for Hooker Technical Data Sheet No. 752 which gives typical data and specifications for both grades of Hooker Monochloracetic Acid.

HOOKER ELECTROCHEMICAL COMPANY

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HOOKER CHEMICALS

Caustic Soda Muriatic Acid Sodium Sulfide Paradichlorbenzene Chlorine Sodium Sulfhydrate

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Creative Ability for Perfumes
of Individuality and Distinction

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ZIMMERMAN LIPSTICKS PREFERRED IN UNBIASED CONSUMER TESTS!

We take pride in just one of the numerous letters which we have received regarding our lipsticks. This quotation comes from a very prominent national advertiser:

"*Incidentally, you may be interested to learn that in unbiased consumer tests of your lipsticks against others, yours was preferred as to texture, appearance and results achieved by use.*"

Using Zimmerman lipsticks or any other cosmetic product would bring the same kind of letters to you. We also manufacture creams, lotions, powders, rouge, cologne and perfumes.

W. F. ZIMMERMAN, INC.

404 Fourth Avenue
New York 16, N. Y.

2 Plants

605-635 So. 21st St.
Irvington, N. J.

• Manufacturers • Packagers •

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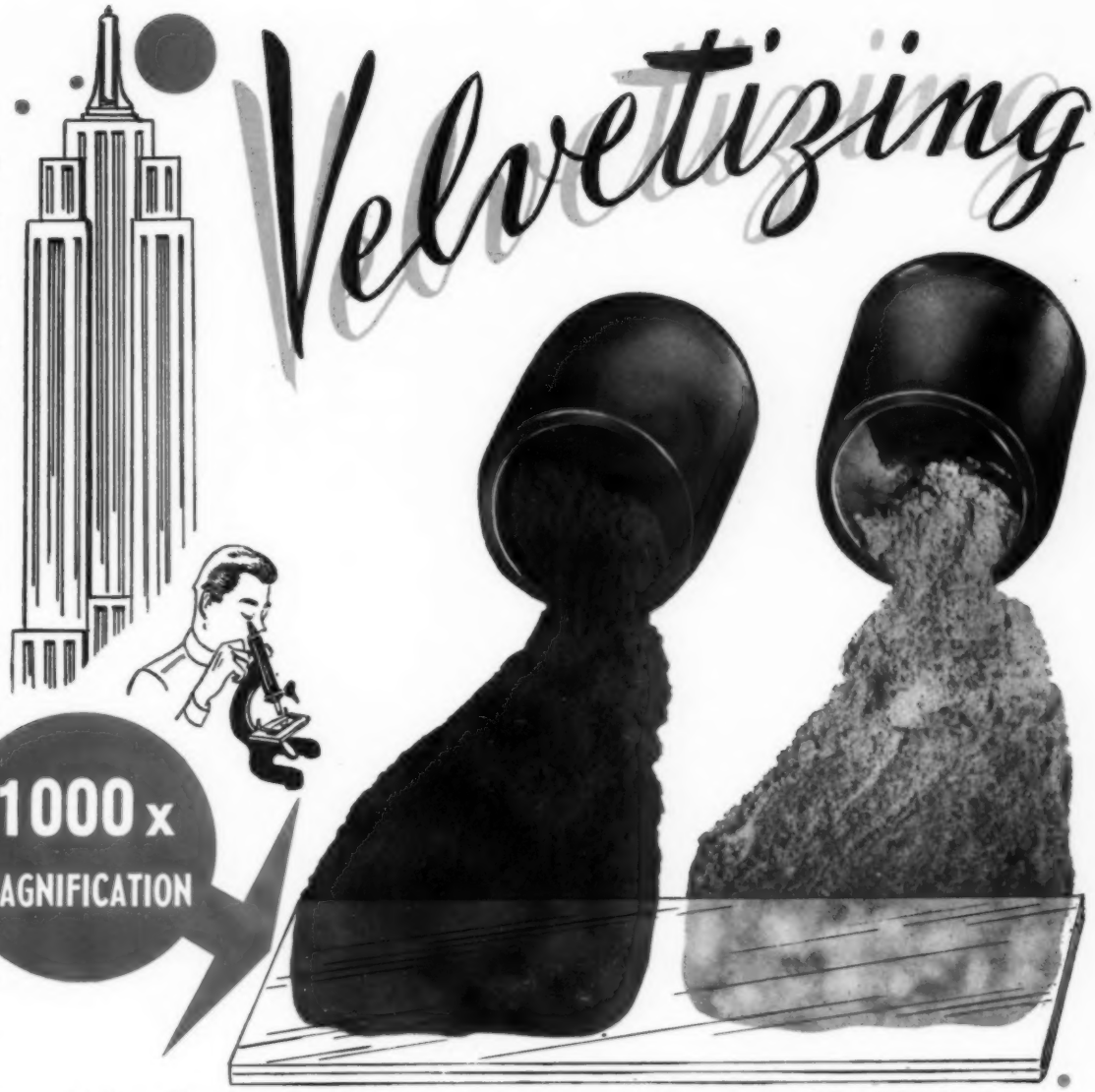
Mexican Representative: Sixto Noreiga R., Apartado 697, Mexico, D. F.
Buenos Aires Representative: T. O. Mudd, Jr., North American Equipment S.R.L.
Av. Cordoba 2431, Buenos Aires, Argentina

Velvetizing



Modern achievement in engineering methods has made possible greater perfection in manufacturing facilities. In our plant, this advance has produced a Rouge and Powder that are the finest on the market due to the exclusive Private Label Process—*VELVETIZING!*

VELVETIZING does what scientists have merely dreamed of doing for ages—

It makes certain our Rouge and Powder cover every peak and valley of the skin.

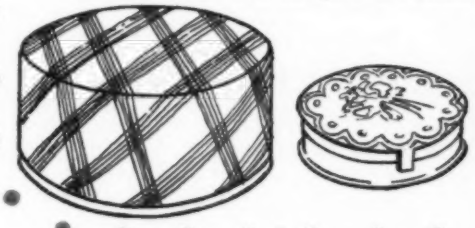
It makes certain our Rouge and Powder are soft to the touch.

It makes certain our Rouge and Powder have greater spreading power and that definitely desirable *soft matt finish.*

It makes certain our Rouge and Powder have the moisture-repelling feature.

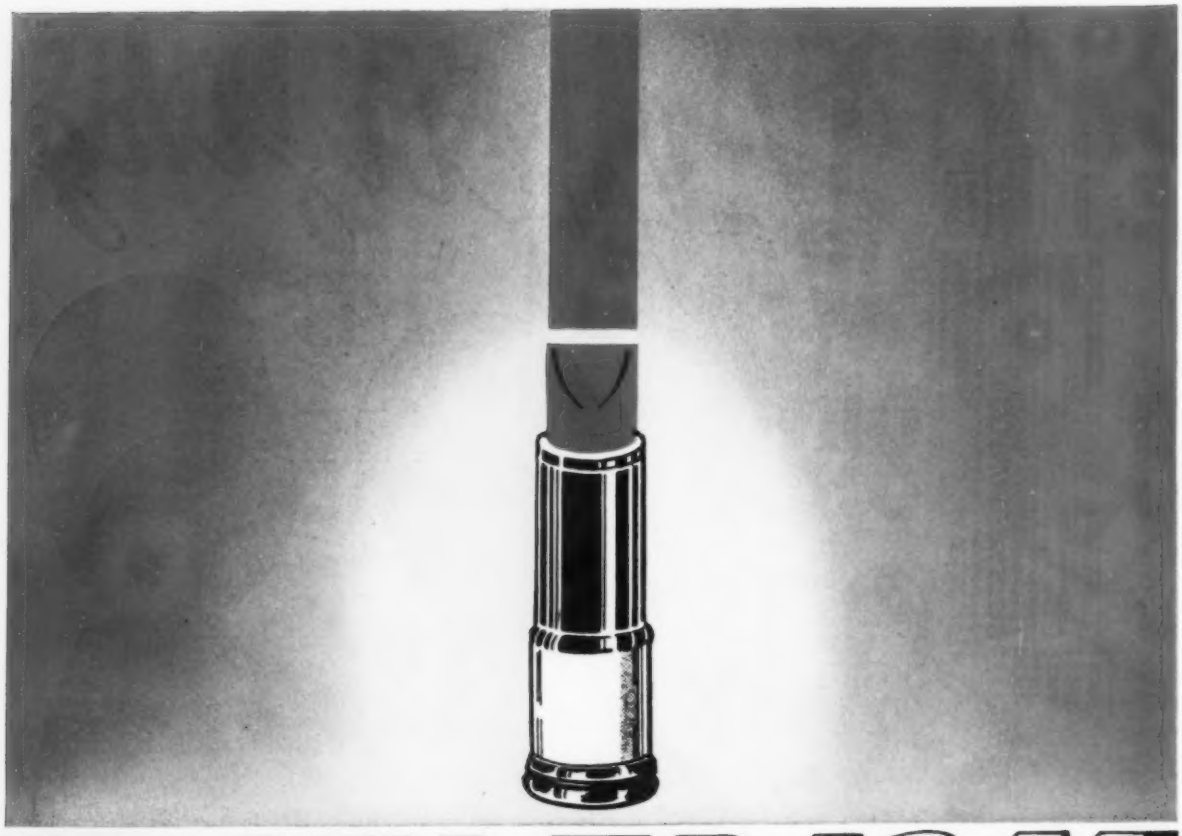
And now for proof! Photomicrographs tell the truth! Those presented here show the texture of our Rouge and Powder magnified 1000 times. Note the softness and density of the microscopic particles—and you'll know Private Label *VELVETIZING* Process truly makes possible this finest Rouge and Powder!

Our factory is at your disposal! Write for samples on your letterhead!



PRIVATE LABEL COSMETIC CO.

520 West 48 St. New York 19



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ONE OR A COMPLETE LINE OF
QUALITY TIME TESTED
PRIVATE LABEL COSMETICS

HELFRICH PRIVATE LABEL COSMETICS

Rouge	Cake Make-up
Cream Rouge	Mascaras
Lipsticks	Perfumes
Eye Shadow	Colognes
Face Powder	Face Creams
Sachets	Lotions
Etc.	Etc.

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● HELFRICH LABORATORIES OF N. Y., INC., 151-163 WEST 26TH ST., NEW YORK ● CABLE ADDRESS: HELFLABS, NEW YORK CHICAGO . . . TORONTO

HELFRICH Laboratories

Exotic SUPREME

...capturing for your practical needs...in this superb interpretation of its subtle fragrance...the mystery of the exotic mood...

FLORASYNTH'S **Exotic** SUPREME

...delicate appeal...amazing practical application...An essence supreme...

Florasynthetics
for faithful
FLORAL REPRODUCTIONS
JASMIN • BERGAMOT • LAVENDER
and others...
Established Essentials!

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Florasynth Labs. (Canada) Ltd. — Montreal • Toronto • Vancouver • Winnipeg

Florasynth Laboratories de Mexico S. A. — Mexico City

Your label is an emblem identifying products in which you take pride . . . and your assurance of protected quality. You can use Heyden Penicillin in products marketed under your label with the confidence that they contain the highest quality of penicillin available.

Unlabeled Vials

Amorphous (yellow) and Crystalline Penicillin Sodium (white)
100,000 units
200,000 units
500,000 units
1,000,000 units

Penicillin in Oil and Wax (calcium salt)

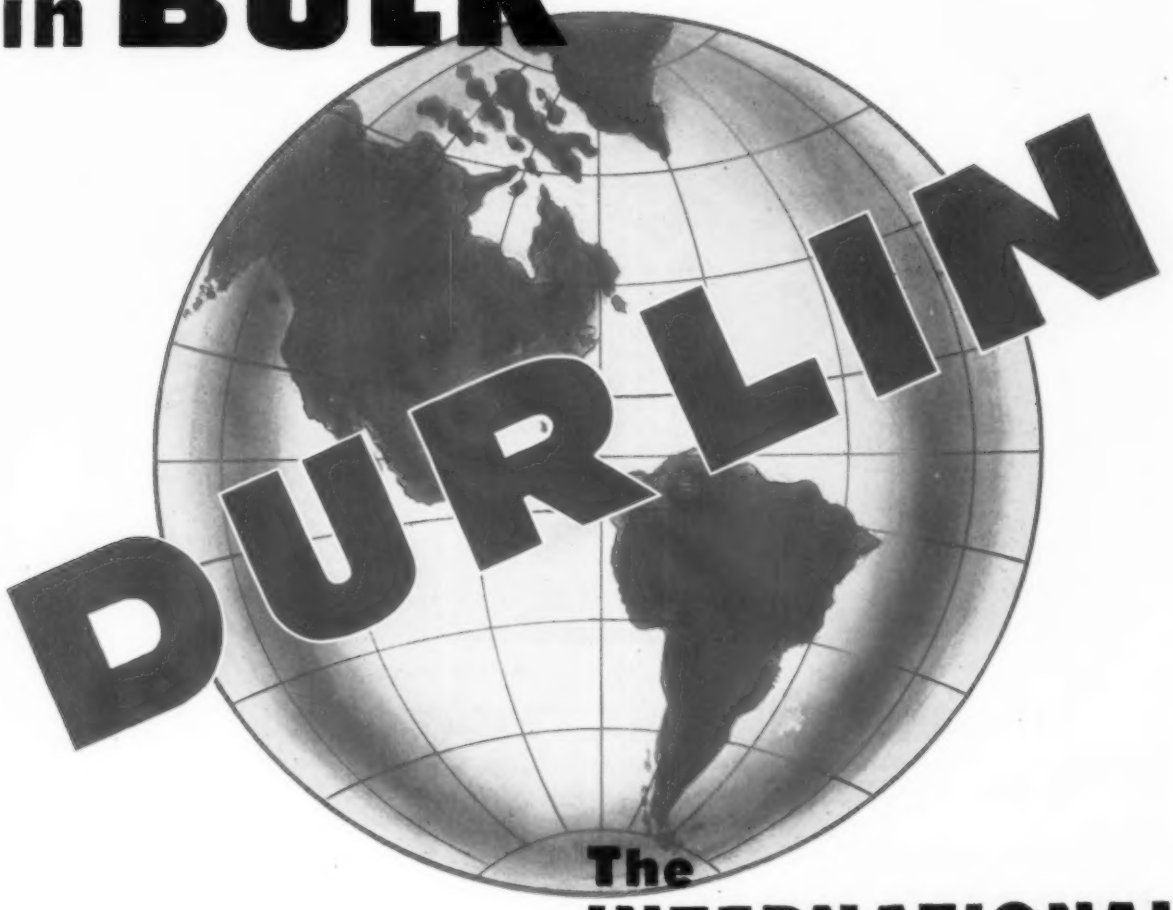
5-cc. . . . . 100,000 units per cc.
5-cc. . . . . 200,000 units per cc.
5-cc. . . . . 300,000 units per cc.
10-cc. . . . . 300,000 units per cc.

Tablets, bulk strips —Each tablet contains 50,000 units of penicillin calcium, hermetically sealed in aluminum foil strips.

HEYDEN CHEMICAL CORPORATION
393 Seventh Ave., New York 1, N. Y.
CHICAGO OFFICE, 20 North Wacker Drive
PHILADELPHIA OFFICE, 1700 Walnut Street

FINE HEYDEN CHEMICALS

NAIL ENAMEL in BULK



The INTERNATIONAL FAVORITE

There have to be sound reasons for *Durlin's* world wide reputation as the foremost name in bulk *Nail Enamel.*

Durlin's reputation lies in a customer service that has paid big dividends to the many users of their *Nail Enamel. Durlin* color sense, shown by an early awareness of fashion trends, selection of colors and aid in packaging has many times helped customers to that "extra edge" which brings success.

When you think of *Nail Enamel,* think of *Durlin.*

DURLIN CO.
744 Broad Street
Newark 2, N. J.
Cable Address: Durlin Newark Newjersey

Florelle

THE NEW PERFUME FRAGRANCE

with the subtly changing character

Florelle—such a demure little fragrance . . . so light, so flowery, so innocent . . . and then, all of a sudden, Florelle becomes warm, mysterious, almost Oriental—a fragrance that can only be described as seductive!

There's drama for you in this exciting new perfume specialty base . . . and drama's what's wanted, these days, especially for products in the higher-price groups.

TRY FLORELLE FOR YOUR NEXT PERFUME AND TOILET WATER PRODUCTION

Write us for a free sample today!

Aromatic Products, Inc.

15 East 30th Street, New York 16, N. Y.

Atlanta, Chicago, Dallas, Memphis, Pittsburgh, San Francisco, Los Angeles

ISCO CHEMICALS AT WORK

IN THE *Cosmetics Industry*

ISCO ABSORPTION BASES

ISCO ABSORPTION BASE #2691

Ideal base for the production of a real cream-type Hand Lotion containing Lanolin and other emollient oils.

ISCO ABSORPTION BASE #3266

The Permanent Wave Cream base. A pure, white, lustrous oil containing Lanolin and other softening oils to counteract the drying effect of alkaline lotions. Procedure is simple: add your own Permanent Wave Lotion to the Isco Base #3266, stirring constantly, and the result is a beautiful Permanent Wave Cream.

OTHER ISCO ABSORPTION BASES

Numerous other Isco bases are available built upon the soluble alcohols of Lanolin. Creams of pure white type or with slight Lanolin color where desired are possible.

Note: All Isco Absorption Bases are for creams of the water-in-oil-type.

WRITE, WIRE OR PHONE TODAY FOR COMPLETE INFORMATION, PRICE SCHEDULES AND SAMPLES.

ISCO

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NEW YORK 6, N. Y.

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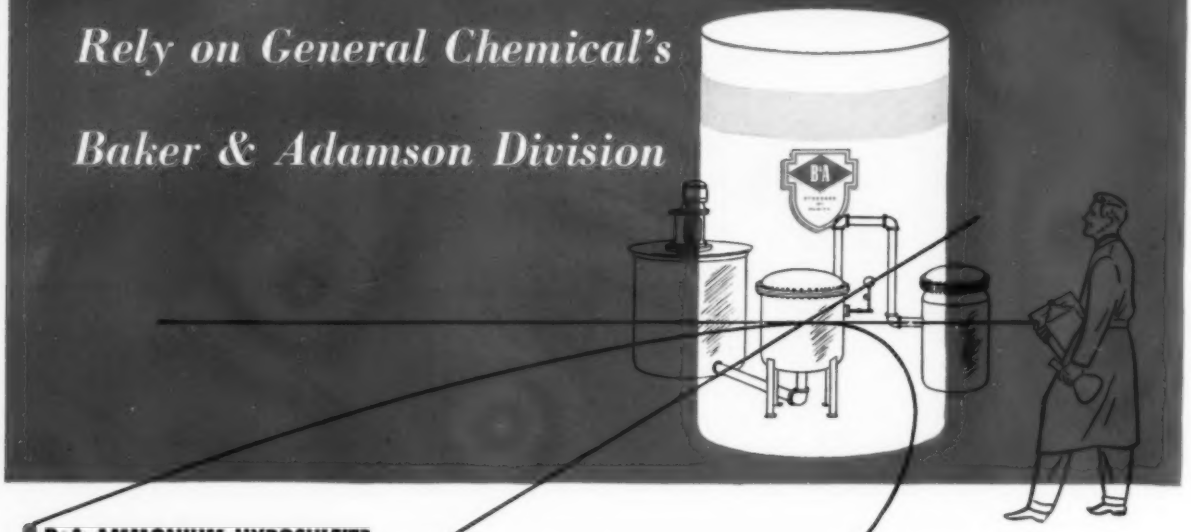
Innis, Speiden & Co.

A NAME AS OLD AS THE AMERICAN CHEMICAL INDUSTRY

For Your Fine Chemical Needs...*

Rely on General Chemical's

Baker & Adamson Division



B&A AMMONIUM HYPOSULFITE

Technical

This B&A Fine Chemical is a clear, colorless liquid assaying an average 60% $(NH_4)_2S_2O_3$. Being stable, low in iron, lead and other heavy metals, as well as free from sulfides, it offers a purity suitable for many exacting uses, such as an ingredient in photographic fixing baths.

Some of the other principal uses of Ammonium Thiosulfate in commercial quantities include: brightening agent added to silver plating baths; eradicator for use in blue prints; and as a substitute for sodium hyposulfite in reducing chromium in the two-bath chrome-tanning process for leather, as well as in the preparation of chromium color baths for textile printing.

B&A ALUMINUM CHLORIDE, Solution

Technical

This superior B&A Fine Chemical is notable for its clarity and for its particularly low iron content. Available in commercial grades of 32° Baume strength, containing not less than 50.3% $AlCl_3 \cdot 6H_2O$. Rigid laboratory control during production helps maintain its quality and uniformity and assures a chemical that will meet exacting industrial requirements such as for the precipitation of pectins from fruit wastes and as an astringent in deodorant compositions. Other applications for this B&A Fine Chemical include: carbonizing agent for wool; hardening agent ingredient of photographic fixing baths; purification of glycerine by-product of soap manufacture; and preparation of color lakes.

B&A MAGNESIUM NITRATE

Crystal and Crystal, Reagent

This high purity B&A product is produced in two grades, both assaying 99% $Mg(NO_3)_2 6H_2O$. While batch analyses show both to be low in undesirable impurities, the Reagent Grade is virtually free from iron, lead and chlorides. Such high purity makes it a material particularly suited as a source of very pure magnesium oxide, used as a catalyst for various organic reactions; also as a desensitizer for lithographic plates.

★ This is the seventh in a series of advertisements reviewing the B&A Fine Chemicals commercially available to American Industry today from the Baker & Adamson Division of General Chemical Company.

Scores of such purity products await your investigation. To learn more about these or other B&A Fine Chemicals that meet your requirements, write or 'phone the nearest B&A Sales and Technical Service Office.

FINE CHEMICALS

B&A

STANDARD OF PURITY

FOR AMERICAN INDUSTRY

GENERAL CHEMICAL COMPANY

BAKER & ADAMSON DIVISION

40 RECTOR STREET, NEW YORK 6, N. Y.

Sales and Technical Service Offices: Albany* • Atlanta • Baltimore • Birmingham* • Boston* • Bridgeport Buffalo* • Charlotte* • Chicago* • Cleveland* • Denver* • Detroit* • Houston • Kansas City Los Angeles* • Minneapolis • New York* • Philadelphia* • Pittsburgh* • Providence* • St. Louis* San Francisco* • Seattle • Wenatchee (Wash.) • Yakima (Wash.)

In Wisconsin: General Chemical Wisconsin Corporation, Milwaukee, Wis.

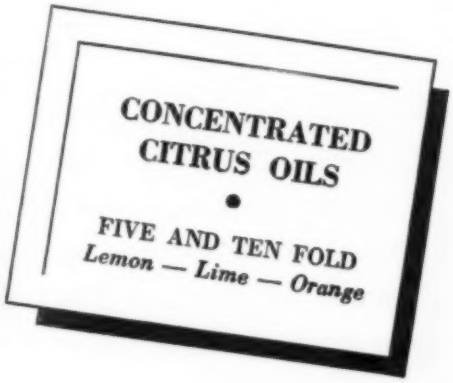
In Canada: The Nichols Chemical Company, Limited • Montreal* • Toronto* • Vancouver*

SETTING THE PACE IN CHEMICAL PURITY SINCE 1882

*Complete stocks carried here.

Proudly we present DULCINODOR, a superior sweetener for the better type perfumes.

DULCINODOR has exceptional tenacity and fragrance. It may be used in French type creations, floral compounds or as a perfume base by itself where a French Ambre note is desired. A sample will be sent upon request.



We publish a monthly Market Report of current prices of essential oils and aromatics. For your copy, please write us today.

Our Research Laboratory Is At Your Service

DR. ALEXANDER KATZ & CO.
Affiliated with Ritter & Co., established 1876.

4641-43 HOLLYWOOD BOULEVARD, LOS ANGELES 27, CALIF.
948 HOWARD STREET, SAN FRANCISCO 3, CALIFORNIA
Plant: Glendale, Calif.

ESSENTIAL AROMATICS CORP.

304 EAST 23rd STREET, NEW YORK 10, NEW YORK

DALLAS • NEW ORLEANS • SEATTLE

ALCOLAN

ABSORPTION BASE

for better

CREAMS

OINTMENTS

LIPSTICKS

An excellent hydrophilic base containing cholesterol, other sterols and Lanolin Alcohols that closely resemble those found in the fatty secretions of human skin. The cholesterol in Alcolan is in a fatty form more absorbable because of its ready miscibility with the secretions of the sebaceous glands. Lengthy complicated formulation is not necessary to obtain good results. Water alone, added to Alcolan produces a lustrous white cream of rich consistency possessing excellent emollient properties. Brilliant white creams with remarkably smooth texture and elegant cosmetic effect may be produced with Alcolan. These creams spread easily and will not dry out, cake or harden.

WRITE FOR DESCRIPTIVE LITERATURE

ROWAG

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LANOLINE PRODUCTS ROWAG WAXES & CHEMICALS

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Cable Address: "Robinwag" · Plant Mamaroneck, N. Y.

Floraldo 1033

IN the creation of fine Lilac, Jasmin and Lily of the Valley perfumes *Floraldo 1033* plays an important role. It also makes a marked contribution to the floralcy of bouquet compositions.

Floraldo 1033 is not designed to impart a new note but rather to enhance the flowery character of perfumes in a new, economical manner. It is reasonably priced at $7.00 per pound or $.60 the trial ounce.

Floraldo 1033 is well worthy of your investigation!

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INCORPORATED

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TORONTO MONTREAL

"N-Z-Amine"★—enzymatic digest of casein
Bulk Casein Peptone
"N-Z-Case"★—laboratory casein peptone
Whole Protein—from milk
"Hy-Case"★—acid digest of casein
Edible and Industrial casein

"De-Vitaminized" Casein★
Lactose USP
Lactose Impalpable
Calcium Lactate USP
Sodium Lactate
Ferric Lactate

More efficient aminos for protein therapy

The value of milk amino acid products in treatment of a variety of illnesses involving protein deficiencies, such as malnutrition in children, indicates broad demand for pharmaceutical products supplying milk aminos.

The efficacy of milk aminos in protein therapy is now well recognized. In the new milk-source amino acid product "Edamin,"★ Sheffield offers superior quality, uniformity and flavor. This combination can make your amino-containing preparations more popular with both physician and patient—as proved by the favorable response to "Edamin" in the many cases where "Edamin" has been used in amino acid therapy.

"Edamin" is a tryptic digest of lactalbumin, containing all the aminos recognized as essential in normal nutrition, with combined content of methionine and cystine relatively high. Animal tests show that the biological value of "Edamin" is equal to that of lactalbumin, itself a superior animal source protein. In form, "Edamin" is a fine, creamy-white powder. It can be flavored or compounded with carbohydrates, minerals, vitamins or other desired nutrients.

•

For free samples, information and prices, write to Chemurgic Division, Sheffield Farms Company, Inc., 524 West 57th Street, New York 19, N. Y. Phone COlumbus 5-8400.

★Trade-mark of Sheffield Farms

Sheffield's Chemurgic Division is constantly at work producing and perfecting a complete line of high-quality milk chemicals sold only in bulk.

SHEFFIELD FARMS COMPANY, INC.

Century-old name in milk—Latest word in milk chemicals

SHEFFIELD FARMS COMPANY, INC.

CHEMURGIC DIVISION

Division of National Dairy Products Corporation

Orange Blossom "V"
BY ALBERT VERLEY & COMPANY
—a fresh, romantic fragrance that is yours to use freely, without prohibitive cost

—TURN THE PAGE

Orange Blossom "V"

BY ALBERT VERLEY & COMPANY

—a veritable replica

of the living flower, and a worthy substitute

for the costly natural absolute

To the French, masters of the language of perfumes, Orange Blossom stands for virginity. From this age-old symbolism comes our American association of the flower with the climax of romance — the wedding ceremony.

To capture that fresh, romantic note and recreate it has long been the goal of the perfumer and the aromatic chemist, and a particular interest of the staff of Albert Verley & Company.

In Orange Blossom "V," this goal has been achieved. Here is an aromatic creation that is truly worthy to replace the natural raw material in your most significant formulas. You can use it as a complete substitute for the natural absolute in all forms of perfumery — with confidence that results are a credit to yourself and to your house. It gives you a conclusive answer to natural material shortages and excessive costs.

Orange Blossom "V" has made a place for itself, along with Jasmin Blossom "V" and other modern replicas, as a permanent part of the perfumer's array of primary odors. Write today for a working sample and prices.

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AND COMPANY
Headquarters for Odor Appeal
D. A. BENNETT AND E. J. STROBL, SOLE OWNERS

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MEFFORD CHEMICAL CO., LOS ANGELES

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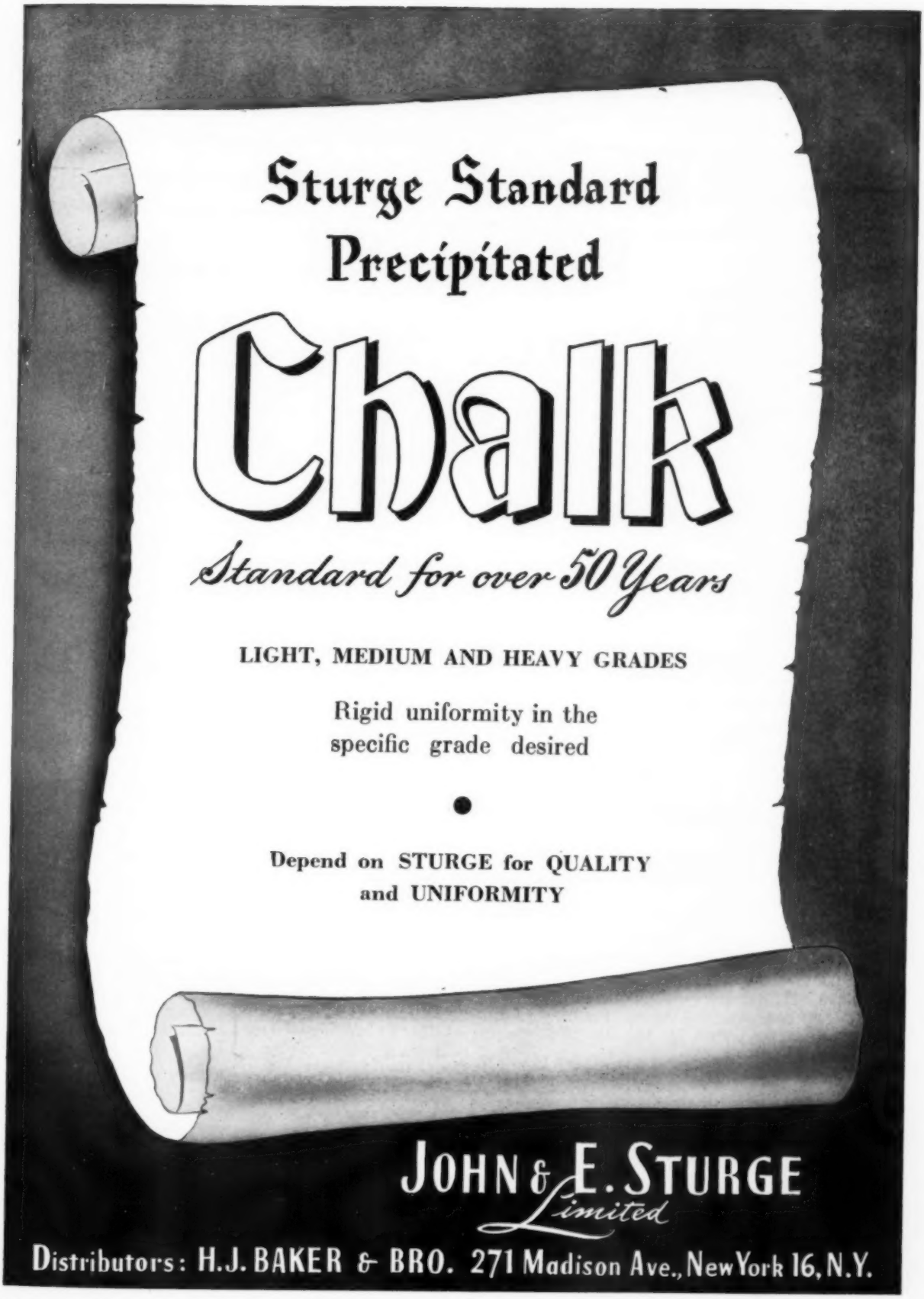
Sturge Standard
Precipitated
Chalk
Standard for over 50 Years
LIGHT, MEDIUM AND HEAVY GRADES
Rigid uniformity in the
specific grade desired
Depend on STURGE for QUALITY
and UNIFORMITY
JOHN & E. STURGE
Limited
Distributors: H.J. BAKER & BRO. 271 Madison Ave., New York 16, N.Y.

What properties do you want in a PETROLATUM?

(Soft-type Micro-crystalline Wax)

SONNEBORN PETROLATUMS

PROPERTIES

This list of properties* of Sonneborn Petrolatums may suggest applications in your manufacturing processes.

- Odorless
- Tasteless
- Non-drying
- Non-sweating
- Absence of gumminess or stickiness
- Will not become rancid
- Low acid-forming tendencies
- Non-contaminating to food products
- Insect repellent
- Sterile—fungistatic
- Non-supportive to pathogenic bacterial and mold growth
- Free of resinous impurities
- No sulphur compounds
- Controlled consistency
- Rich in emollient properties
- Plasticizing, lubricating, penetrating, softening
- Freely miscible with all petroleum products, many essential oils, most animal and vegetable fats and oils, and waxes
- Low rate of oxidation
- Protect metallic surfaces against rust and corrosion
- Seal against moisture evaporation
- Render fibrous materials moisture-proof, grease-proof
- Render surfaces repellent to adhesive substances

PHYSICAL CHARACTERISTICS*

Saybolt Melting Point: 104° F.—135° F.
A.S.T.M. Melting Point: 106° F.—137° F.
A.S.T.M. Consistency: 160—240
Saybolt Viscosity: 45—75 @ 210° F.
Flash Point: 360° F.—430° F.
Specific Gravity: 0.840—0.870 @ 60° F.
Color: Amber to White.

*These properties and characteristics represent the entire range of Sonneborn Petrolatums—not any one grade.

NATURE OF SONNEBORN PETROLATUMS—Petrolatum is a colloidal system in which *liquid* hydrocarbons constitute the internal phase while the external phase comprises *solid* hydrocarbons.

NOT LIKE PARAFFIN WAX—Petrolatum is micro-crystalline, whereas paraffin wax forms crystalline aggregates.

APPLICATIONS—Soft type micro-crystalline waxes have a virtually limitless range of industrial applications, as suggested by the list of properties shown above.

TYPES OF SONNEBORN PETROLATUMS—*Fonoline* (soft) . . . *Protopet* (medium consistency) . . . *Perfecta* (medium consistency with high melting point). Wide range of colors. Special types refined to individual specifications.

SONNEBORN SERVICE—A 65-year experience in refining petroleum products is available to firms wanting to know more about the use of SONNEBORN PETROLATUMS in industrial processes. Check coupon below for information on properties most important to you.

White Oil and Petrolatum Division

L. SONNEBORN SONS, INC.

Refiners of Petroleum Products

88 Lexington Avenue, New York 16, N. Y.

White Oil and Petrolatum Division, L. SONNEBORN SONS, INC.
Dept. 05, 88 Lexington Avenue, New York 16, N. Y.

Please send latest information on Sonneborn PETROLATUMS with special reference to use specified on dotted line below:

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Name_____ Title_____

Company_____

Address_____

City_____ P. O. Zone____ State_____

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News of Importance to AMERICAN PERFUMERS
Who Want Success Through Quality

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Distinctive American raw materials for perfume . . . in the French tradition

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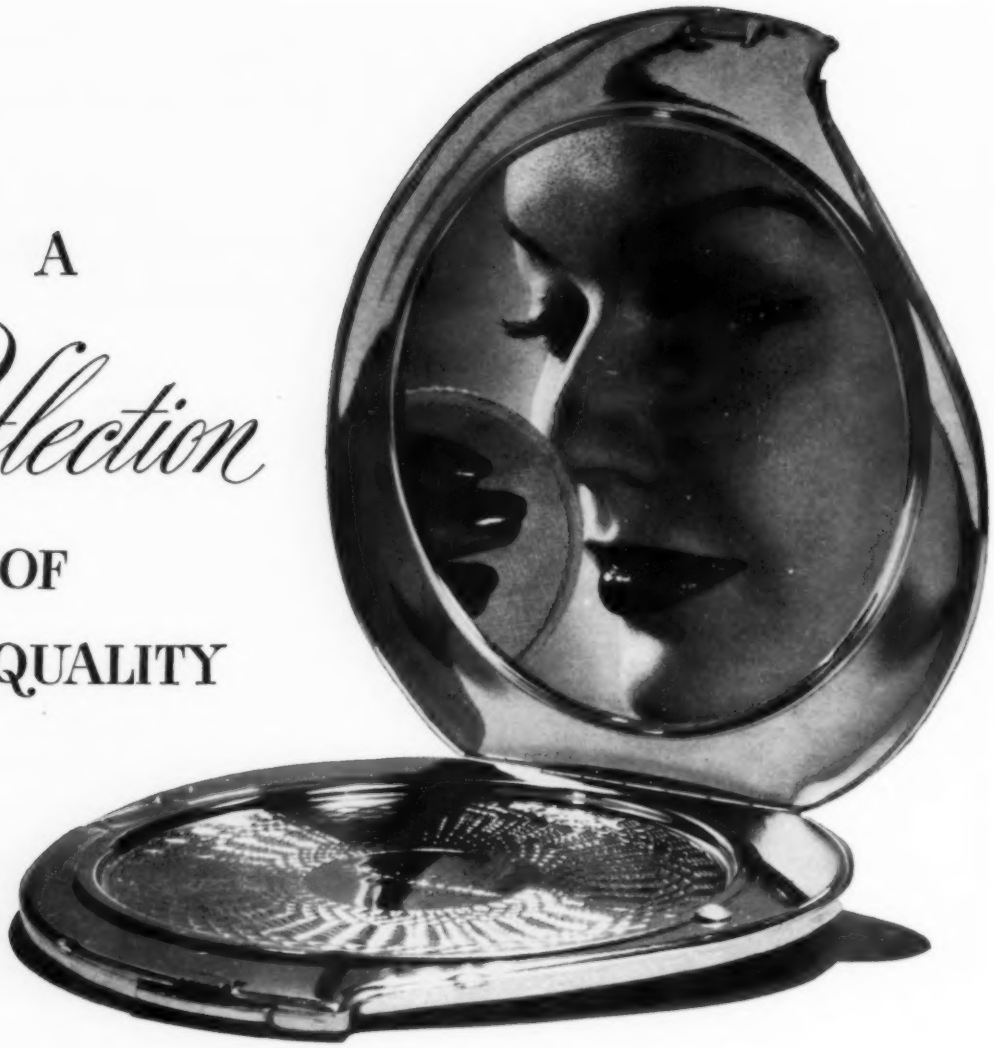

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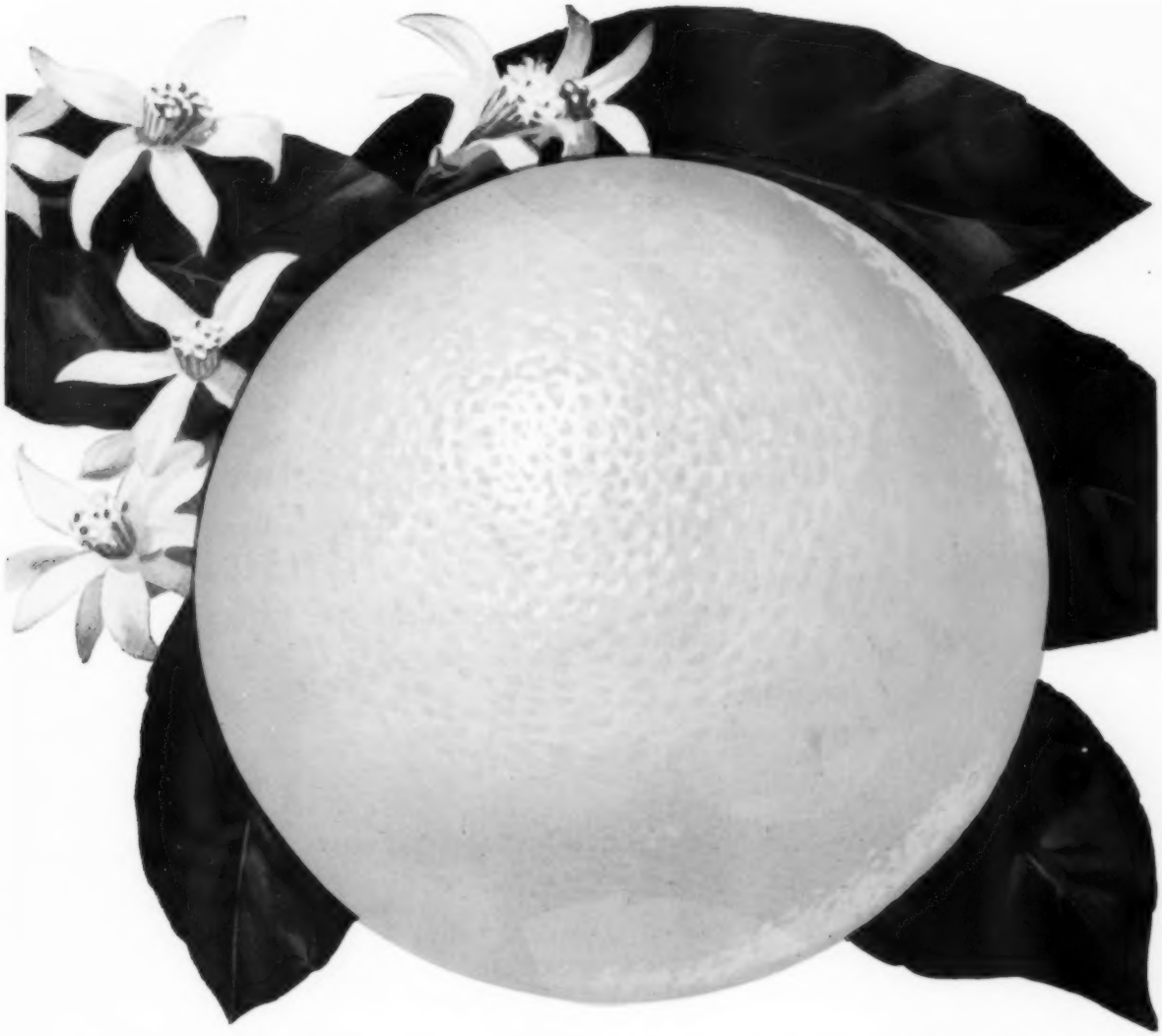

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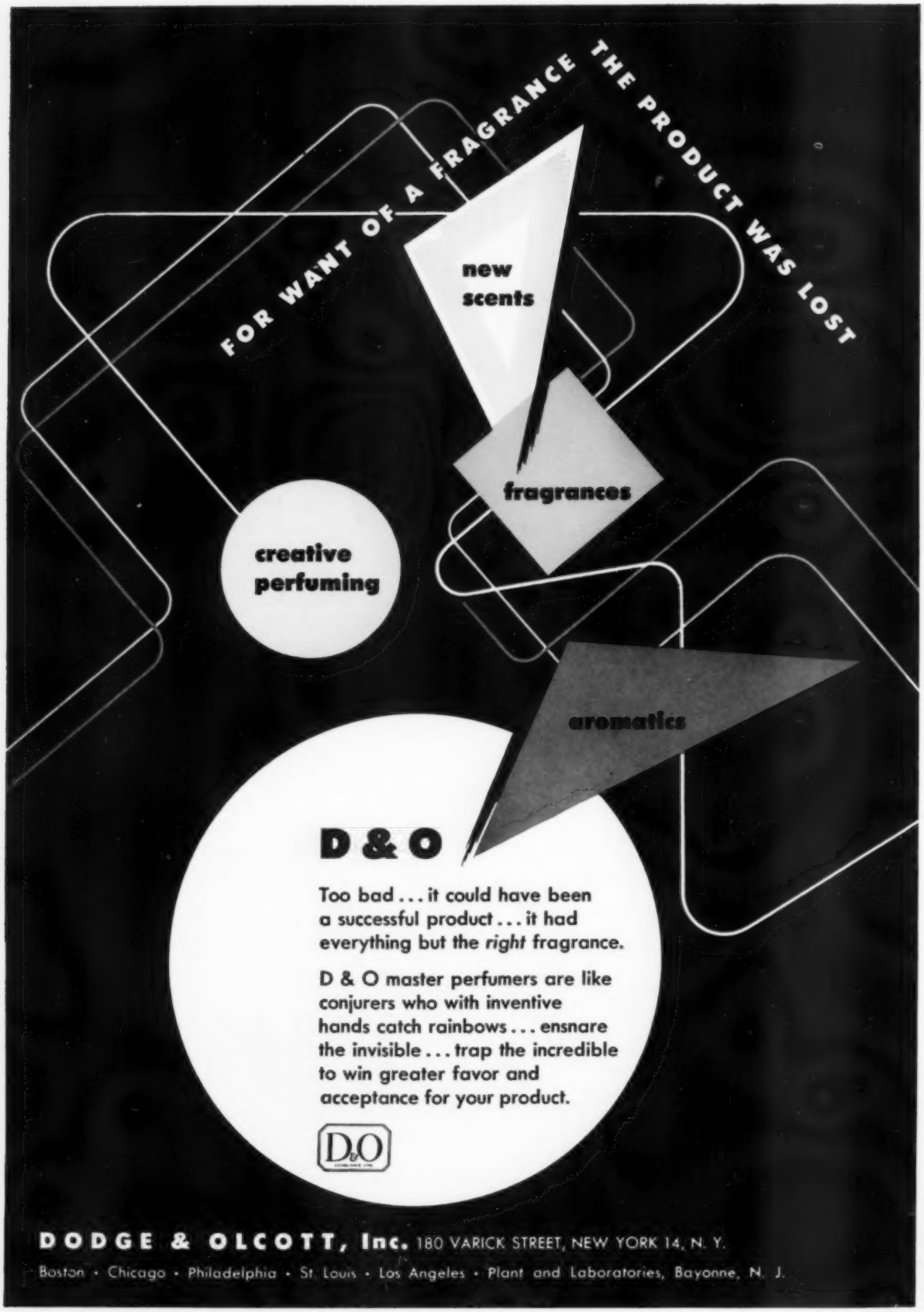
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The ethyleneamines are important as organic alkalies and as intermediates for many industrial compounds. With these materials, the way has been opened to product improvement and lower cost processes, in the fields of textile, pharmaceutical, resin, and petroleum chemicals.

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Ethylenediamine . . . intermediate for fungicidal chemicals . . . for pharmaceuticals, such as aminophylline, important for heart afflictions . . . for thermoplastic resins, such as norelac, a heat-sealing adhesive for packaged food, soap, and other merchandise.

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Aminoethylethanolamine . . . for finishing compounds to give fabrics a softer hand . . . for surface active agents, in ore beneficiation.

Additional information to determine which of the ethyleneamines can best serve your needs is contained in our "Nitrogen Compounds" booklet (F-4770). In writing for your copy, please address Department F-7.

The Step Beyond Incendiaries

Many claim that Roger Bacon was the first to announce the formula of gunpowder in 1242. Bacon, by combining saltpeter, sulfur and young hazelwood, produced an explosive considerably advanced beyond mere incendiary compositions. Some think he may have blundered onto gunpowder while experimenting with incendiaries.

No evidence exists that Bacon was aware of the propelling power of his potassium nitrate, charcoal and sulfur. He realized its explosive qualities, and that people might be blown up or frightened by it. Propulsive powers of gunpowder may have been first recognized in Florence about 1326 when the city's Council of Twelve was given authority to appoint persons to superintend manufacture of cannons of brass and iron balls to defend the city.

One hundred and thirty potassium compounds carrying the Mallinckrodt label are manufactured in an 80-year tradition of fine chemicals. **For potassium products of utmost, uniform, dependable purity specify Mallinckrodt Potassium Acetate, Bicarbonate, Bromide, Iodate, Iodide, Phosphate, Sulfate, Sulfite, Metabisulfite, etc.**

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80 Years of Service to Chemical Users

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"Something that will bring Bali-Bali to Coney Island!"

KEEPING POSTED

The F. T. C. and Acetphenetidin

THE Federal Trade Commission has dismissed a complaint which it issued October 28, 1944 against a manufacturer of a preparation containing aspirin, acetphenetidin and caffeine citrate. The directions for the product provided that the user would receive less than 15 grains of acetphenetidin in 24 hours. The complaint charged:

"Respondent represents . . . that its preparation will relieve certain pains. In many cases these pains, and pains from other causes indistinguishable by the layman from pains from other causes, will persist for an extended period of time and will tend to recur after the palliative effect of the analgesic may have worn off. The palliative effect of respondent's preparation does not extend over a period exceeding four hours for each prescribed dose. Because of these facts, the usual and customary condition, in case of persistent or recurring pain, is and will be that there will exist a tendency for the sufferer to take more frequent and larger doses than prescribed. The use of this preparation in a quantity exceeding the recommended dose or with greater frequency than that recommended may be dangerous to health.

"Paragraph Five: The use by respondent of the foregoing false advertisement conceals the potential danger to health in overdosage, and has the capacity and tendency to and does mislead and deceive a substantial portion of the purchasing public into the erroneous belief that said preparation is safe and harmless for use under the conditions prescribed in the respondent's advertisements and under such conditions as are customary and usual, and to induce a substantial portion of the purchasing public to purchase said preparation in such belief."

On June 16, 1947 the Commission, with all five of the Commissioners participating in the decision, dismissed the complaint, the dismissal notice containing the following statement:

"Reconsidering the complaint on its own motion, the Commission concluded that 'there is not sufficient danger' in the use of the product to 'warrant a requirement that respondent's advertisements include a revelation with respect thereto'."

Some time ago the Food and Drug Administration stated that it was not necessary to include cautions or warnings in the labeling of a product that provided for not more than 15 grains of acetphenetidin in 24 hours. Several cases are pending before the Commission concerning acetphenetidin containing products because they do not carry adequate warning statements in their labeling. The warnings that the Commission has been demanding were those originally issued by the FDA in 1940. Now that this one case has been dismissed it would seem that the Commission is following the lead of the FDA.

FDA Warning Statements

SPEAKING of warnings in the labeling of drug products, the Food and Drug Administration has divided up among its medical officers for study the original suggested warnings issued in 1940. Information is also being secured by the FDA from experts in the various fields to determine whether or not the same type of warnings should be reissued, or in what manner they should be modified.

Anti-Malarial Patents Available

PATENTED anti-malarial drugs, discovered by the Office of Scientific Research and Development during wartime will be offered to pharmaceutical manufacturers on a non-exclusive, royalty-free, revocable license basis, according to the Office of Technical Services, Washington. Certain pharmaceutical manufacturers have undertaken to finance the cost of filing and prosecuting applications for patents in foreign countries where malaria is prevalent, with the understanding that these patents will be assigned outright to the United States Government. These foreign patents will then be granted to United States manufacturers on a royalty-free, non-exclusive basis. Participating companies have named Walton M. Wheeler Jr., secretary and general counsel of Eli Lilly & Co., Indianapolis, as their representative. Any company desiring to cooperate should contact Mr. Wheeler, according to OTS officials.

New York Restricts Barbiturates

BARBITURATES are now really pinned down in New York City. The new regulations provide that: 1) Barbiturates may be dispensed only on written prescription by a practictioner; 2) Barbiturate prescriptions not to be refilled except where the practitioners so indicate and state times and intervals or refilling; 3) Pharmacists, wholesalers, manufacturers and hospitals to keep records of receipts, distribution and dispensing of barbiturates; 4) Original inventory to be prepared by pharmacists, wholesalers, manufacturers and hospitals not later than January 1, 1948; 5) Possession for other than authorized purposes prohibited; 6) The inclusion of a provision which would prohibit the obtaining of barbiturates through fraud or deceit; 7) The definition under the new section for barbiturates to except barbituric acid and other barbituric compounds which do not have a hypnotic or somnifacient effect.

Guarantees Under Federal Law

THE matter of guarantees under the Food, Drug, and Cosmetic Act is coming for an increasing amount of attention. The latest case involves a manufacturer of vitamin preparations who gave a continuing guarantee to a distributor who was engaged in selling the preparations in interstate commerce. The manufacturer giving the guarantee and the distributor were located in the same State, so the transaction was intrastate. Some time after the guarantee was given the goods were found to be adulterated and misbranded and the Food and Drug Administration proceeded against the manufacturer. The manufacturer pleaded that the goods were not shipped in interstate commerce and the District Court dismissed the case. However, on direct appeal to the U. S. Supreme Court, the District Court decision was reversed. The Supreme Court held that the Food, Drug, and Cosmetic Act did apply, stating:

"The Supreme Court majority held that the possibility that a false guarantee may give rise to an illegal interstate shipment . . . is strong enough to make reasonable the prohibition of all false guarantees (to dealers) even though some of them may actually result only in intrastate shipments."

More for Drug Research Needed

WRITING in the *New York Times Magazine*, on "The Way to Better Medical Care" Howard Rusk, M.D., an associate editor of the *Times* and chairman of the Department of Rehabilitation and Physical Medicine at the New York University College of Medicine, brings up the point of the amount of money spent on medical research, which he indicates is woefully small. Says Dr. Rusk:

"First, take medical research, on which we all agree. It is estimated that only about $20,000,000 a year is being spent by the Government, private foundations and voluntary organizations in the total medical research program. This is shamefully little when the Department of Commerce reported in 1943 that $275,000,000 is spent each year for industrial research, and in 1947 Congress appropriated over $29,000,000 for the Department of Agriculture alone to investigate the cause and cure of plant and animal disease. The Mental Health Act and the National Cancer Institute of the United States Public Health Service are only first steps in the total problem, and seem very small and inadequate when compared with the above-mentioned fields of non-medical research.

"The people want more medical research. Eighty-five per cent of the individuals questioned in a recent poll were in favor of the Government's appropriating $100,000,000 for research in tuberculosis and heart disease, and 80 per cent were willing to pay more taxes to make it possible. Eighty-seven per cent of the people polled by Gallup in 1946 were in favor of the Government's appropriating $100,000,000 for cancer research, and 72 per cent were willing to have their taxes increased to make this possible."

Coty To Repackage

COTY plans to restyle all boxes, despite increased costs, but will maintain pre-war prices in the domestic market, according to Philip Courtney, Coty president. The Company has found that perfume sales above the ten dollar class have declined sharply but products in the $2.50 to $5 range are selling well.

F.W.D.A. To French Lick

THE Federal Wholesale Druggists' Association has definitely decided to hold its annual fall meeting at the French Lick Springs Hotel, French Lick, Indiana, on Wednesday, Thursday, and Friday, October 8, 9, and 10. The first day will open with a closed meeting of wholesalers, and this will be followed by a cocktail hour for manufacturers and wholesalers in the evening. The official opening meeting for manufacturers and wholesalers will be held on the second day, along with the golf tournament in the afternoon and a dinner meeting with entertainment. The morning of the third day will be devoted to an open forum, "Information Wanted," which will be for manufacturers and wholesalers. A formal banquet will be held that evening.

An Outstanding Paper On Cold Wave

AN OUTSTANDING paper delivered at the recent meeting of the Scientific Section of the Toilet Goods Association was that on the "Percutaneous Toxicity of Thioglycolates" by John H. Draize, Elsie Alvarez, and Marie F. Whitesell, all of the division of pharmacology, of the Food and Drug Administration. The paper in question was an excellent scientific paper which could well serve as a model for studies of this kind in our industry. In an approved release, Dr. Draize said that "These studies support the view that ammonium thioglycolate hair wave solutions are safe for use if the usual directions are carefully followed." Here is an instance of the Food and Drug Administration voicing approval of a cosmetic product and giving scientific data to support its approval. We would like much more of the same thing.

In the matter of seizing a device in the home, the Food and Drug Administration has won a reversal of the ruling by the District Court in Oregon which decision ruled against such seizure. The Circuit Court of Appeals has ruled that the FDA does have the right to enter the home and seize such products, if such action is indicated.

Medical Advances of 1946

THE twelve "golden" medicinal advances of 1946 are listed by Doctors Theodore G. Klumpp, president, and Justus B. Rice, vice-president and medical research director of the Winthrop Chemical Company, as follows: radioactive isotopes, by-products of the atomic pile; two anti-histamine drugs, pyribenzamine and benadryl, that "appear effective in controlling symptoms of hay fever and uticaria;" the antibiotic, streptomycin, the value of which was "placed on a firm foundation in 1946"; cytochrome C, an enzyme, useful in such diverse disorders as various kinds of shock, angina pectoris, Raynaud's disease, barbiturate poisoning, pulmonary emphysema, degenerative diseases associated with arteriosclerosis and certain cerebral dysfunctions; rutin, a flavonal compound, derived from green buckwheat, found useful in diabetic retinitis; the metabolic agent, n-propyl thiouracil, that may prove to be "a really effective, safe, medical treatment for many cases of thyrotoxicosis"; dengue fever vaccine; mumps vaccine; the antimalarial aralen; the progress in synthesis of compounds closely similar to vitamin A; the use of curare, the ancient Indian arrowhead poison, in anesthesia and in the treatment of conditions characterized by muscle spasm or spasticity; and, finally, advances made in cholera therapy, sharply reducing mortality by the use of sulfadiazine and sulfaguanadine.

Stearns Research Grants

FREDERICK STEARNS & CO. Division, Sterling Drug, has made seven research grants to five different universities, providing for pharmacological, therapeutic, and organic chemistry investigations in antispasmodic, anti-asthamatic, analeptic, analgesic and anesthetic compounds, as well as pharmacological research on sympathomimetic amines. Two of three grants to the University of Michigan, Ann Arbor, cover organic chemistry research on antispasmodics under the direction of Dr. F. F. Blicke, while the third to this university covers pharmacological research on analgesics and anesthetics under the direction of Dr. M. H. Seevers. Other grants are to the Division of Pharmacology and Experimental Therapeutics, University of California Medical School, San Francisco, covering research on antispasmodic, antiasthmatic and analeptic compounds, under the direction of Dr. Hamilton H. Anderson; Department of Therapeutics, New York University College of Medicine, covering therapeutic research on antispasmodic compounds and anesthetics, under Dr. Robert C. Batterman; Department of Chemistry, Indiana University, Bloomington, Ind., covering organic research on intermediates for antispasmodic compounds under Dr. E. Campaigne; Department of Pharmacology, University of Georgia Medical School, Augusta, Ga., covering pharmacological research on antispasmodics under Dr. Robert A. Woodbury.

Drug Peak Sales to Continue

PEAK sales achieved last year will be maintained during 1947 although competition for the drug sales dollar is definitely on the increase while the break-even point of business has risen substantially, James Hill Jr., president of Sterling Drug told company executives.

Best Financial Reports

TEN drug companies were cited for excellence of their 1946 annual financial reports by Financial World, national weekly magazine. The companies cited are: Abbott, Bristol-Myers, Lambert, McKesson & Robbins, Merck, Parke Davis, Plough, Squibb, Sterling Drug, and Vick Chemical. In the final judging, to be completed by mid-September, one of these companies will be judged as having the best 1946 annual report of the drug industry, and will then be awarded a bronze trophy. Last year the 1945 annual report of Vick Chemical Company won the "Best-of-Industry" award in this classification.

Penicillin Problems

IT APPEARS that the whole story surrounding penicillin has not yet been unfolded. First we had the yellow, somewhat impure, amorphous penicillin. During the war years very small lots of pure crystalline penicillin were made, but only for experimental use, since the production demands were so heavy that the extra steps involved in making the crystalline product could not be permitted. Following the war more crystalline material was made and, in fact, one large maker swung over completely to the production of the crystalline drug. Now, as revealed by Dr. Henry Welch, chief of the division of penicillin control and immunology of the Food and Drug Administration, at the recent ADMA meeting, certain lots of the amorphous product contain an enhancement factor, and investigations of this factor have afforded an improved method of determining presence of this factor, an insight into the chemical nature of the agents responsible, and a probable explanation for its action.

"Present indications are that the factor is a strong organic acid," said Dr. Welch, stating further that, "more than one acid may be active. "Preliminary data indicate that the materials may be closely related to para-hydroxy-phanylacetic acid." While the physiological mechanism by which the enhancement factor functions is not understood, a logical explanation for its action is afforded by the fact that blood levels thirty minutes or more after injection of a given dose of crystalline penicillin plus the factor may be two to sixteen times as high as blood levels following injection of the same amount of penicillin alone.

Thirteen Making Bacitracin

THIRTEEN companies are now reported to be making the antibiotic, bacitracin for experimental distribution. Included among this number are Bristol-Myers, Merck, Penick, Pfizer, Sharp & Dohme, Squibb and Wyeth.

A New Streptomycin Form

A NEW highly-purified form of streptomycin, to be marketed as Streptomycin Merck (calcium chloride complex), has been announced by Merck & Co. The new form is a white, finely-divided substance close to chemical purity, which is said to have an advantage in the reduction of pain on injection, as well as in a diminishment of side reactions which were sometimes found with the earlier compounds.

Tooth Powder Sales Off

TOOTH POWDER sales are said to have fallen off to quite some extent, the sales of tooth pastes picking up the lost tooth powder volume. The reason for this shift of preference is not exactly clear, but some interested parties are placing the blame on the ersatz packages used for tooth powder during the war years when steel and other metals were sharply restricted for civilian use.

Those Hormone Patents

MANY large companies in the drug manufacturing business are said to be watching sharply the action of the Government with reference to Schering Corporation. This is mainly because of the patents which Schering controls covering the manufacture of synthetic hormones. No one seems to know whether or not the Corporation will be sold by the Alien Property Custodian, whether it will be retained, whether its patents will be made available to other manufacturers, or what will happen. But there is much curiosity regarding these patents, and much of this curiosity is not idle.

Penicillin in Tooth Decay

DEFINITE reduction in susceptibility to tooth decay was found in a group of boys who cleaned their teeth with tooth powder containing penicillin, according to Doctors Thomas J. Hill, professor of Clinical Oral Pathology, and Albert H. Kniesner, assistant professor of Pathology and Periodontia, and research associates at the School of Dentistry, Western Reserve University. Two hundred and fifty-two boys participated in study of dental caries. Of these, 161 cleaned their teeth with the penicillin tooth powder, and the remainder cleaned them with an unaugmented dentifrice. A record of the number of cavities and the size of the cavities was made at the beginning of the study, and another study will be made at the end of the year's work at the institution. The preliminary report was made on the basis of the number of acidophilus bacilli in the boys' mouths. The bacillus breaks down sugars and starches in the mouth into acids which are the direct cause of decay. The bacillus count in 65 per cent of the mouths of the boys leaning their teeth with the penicillin dentifrice went down, and in only four per cent of the cases did it go up. Among the boys cleaning their teeth without penicillin the count went up in 20 per cent, and down in 43 per cent.

"We did not expect such a great decrease among the boys in the control group," said Dr. Hill, who continued, "This study shows that penicillin produces a decrease in susceptibility to dental caries. We cannot say now whether we will be able, at the end of our studies, to recommend the inclusion of penicillin in dentifrices for the prevention of tooth decay. We will want more positive results, but I believe we will get them." He estimated that the boys, who were between the ages of 8 and 16 and of average health, or perhaps a little better than average, had taken into their mounts between 500 and 1,000 units of penicillin every time they cleaned their teeth. This, he pointed out, was a very small amount of the drug.

The studies are being made under a $4,500 grant from the U. S. Public Health Service, and a $500 grant from the Cleveland Dental Society.

New Sterling-Winthrop Laboratory

A NEW laboratory for the Sterling-Winthrop Research Institute, at East Greenbush, N. Y., is being financed by the Mutual Life Insurance Company of New York. The agreement provides for Mutual Life to purchase from Sterling a 21-acre tract of land and to finance the construction of the laboratory, meaning an investment of about $3,000,000. The development will be leased back to Sterling for a thirty-year term, with the tenant having the privilege of renewing the lease for six successive terms of ten years each. The development, which is expected to be completed within twelve to fourteen months, includes a four-story, steel-frame research laboratory divided into four wings for chemical and biological research and for administration, as well as complementary buildings.

Fitch Asks Trade Conference

THE F. W. FITCH COMPANY, in a formal motion filed with the Federal Trade Commission, has requested that the Commission make a general investigation of the advertising claims of manufacturers of scalp preparations and shampoos with a view to calling an industry-wide trade conference to outlaw practices considered to be in violation of the law. The Fitch Company was cited by the Commission in a complaint filed in May, 1946, in which the Commission accuses Fitch of making false and misleading statements in the avdertising of "Fitch's Dandruff Remover Shampoo." The Company answered the complaint a month after it was filed, but no further action has been taken by the Commission since that time. Fitch claims that there are approximately 100 manufacturers of shampoos and scalp preparations in the country, and the advertisements of a number of them were cited to show that there were no substantial differences in the claims for their products from those made by Fitch.

Action of the Commission in leveling charges only against Fitch, and its failure to bring the matter to a speedy hearing and adjudication, says Fitch, has resulted in irreparable damage and has created the appearance among the public and the trade that the statements made by Fitch are considered culpable only if they are made by Fitch. The company's petition said:

"Respondents are advised and believe that the purpose of the law and the objectives of this commission are to police industries and the members thereof so as to prevent practices which come within the condemnation of the statute. The accomplishment of this purpose and objective is defeated if one member of the industry is held to the requirements, and limitations are not applied to other members of the industry, or the application of which to other members of the industry is unreasonably delayed."

F.D.A. Pamphlet For Importers

IN ORDER to assist foreign shippers and manufacturers of foods, drugs, and cosmetics who desire to resume trade with this country, the Food and Drug Administration has issued a new pamphlet explaining requirements for admission of such goods into this country. Entitled "Import Requirements of the United States Food, Drug, and

Cosmetic Act," the publication explains the Act in simple terms and gives some of the reasons for refusal of entry of certain products in the past. Products most commonly imported into this country are stressed throughout the pamphlet. Single copies of this booklet, listed as Food and Drug Administration "Miscellaneous Publication No. 2," may be obtained from the Food and Drug Administration, Washington 25, D. C. Copies may also be purchased direct from the Superintendent of Documents, Washington 25, D. C., in any quantity, at 15 cents per copy.

New Western Reserve Pharmacy Building

PLANS have been drawn for construction of a new half-million dollar home for the School of Pharmacy of Western Reserve University, according to George Miller, president of Strong, Cobb & Co., and chairman of the Western Pharmacy Foundation which is conducting a national campaign to raise $528,850 with which to erect and equip the building. "Plans for the new building will give the School of Pharmacy one of the most modern pharmacy education plants in the country, adding another major link to Western Reserve's great Medical Center," said Mr. Miller. A pioneer in the field of manufacturing pharmacy education, the School's new manufacturing pharmacy department will be equipped with modern tablet, ointment, capsule, and granulating machinery.

Vitamin Foundation Grants

THE National Vitamin Foundation have voted four grants-in-aid amounting to $32,800 for nutritional studies, according to Dr. Robert S. Goodhart, scientific director. A grant of $13,000 went to the Philadelphia Lying-in Hospital to determine the significance of nutrition and nutritional deficiencies in pregnancy. The University of Vermont School of Medicine received $5,800 for a nutrition survey being conducted on the school children of Burlington, Vt. The University of Southern California School of Medicine was awarded $6,000 for a study of the role of nutrition in specific immunity and hypersensitivity. Finally a grant of $8,000 went to New York University for the study of the relation of pantothenic acid to the adrenal glands and carbohydrate metabolism.

Increasing Multi-Vitamin Factors

WITH the increasing numbers of vitamin factors that must be included in multi-vitamin capsules—folic acid being the latest factor—the size of the capsules is increasing to the extent that they are likely to become too large to be swallowed readily by the average individual. A capsule of three minim size is preferred as this can be easily swallowed by practically all people. But due to the fact that a very large producer of these capsules for many distributors has been using straight oils as his source of vitamins A and D, the size of the capsules with the increased number of factors has been enlarged in some instances to seven minims. At this size, many people will not be able to swallow the capsule, and certainly this is considered the maximum size that can be used. Perhaps the makers will have to discontinue the use of straight oils for sources of vitamins A and D and use the concentrates. The objection to this is that the concentrates are more costly than the straight oils. This means that the cost of the capsules will not only increase because of the newly added factors themselves, but also because concentrates will have to be used to be used instead of straight oils to make room for these new factors.

Glycerine Production Might Fall

WITH soap production believed to be running ahead of consumption, there is said to be a strong possibility that output of soap and glycerine will fall in the second half of the year some 15 to 20 per cent below that registered in the first half of the year. Glycerine production in the first five months of this year exceeded production in the first five months of 1944—a record production year—by 29,000 pounds. This year's five month output reached 86,228,000 pounds, against 86,199,000 pounds for the first five months of 1944. Factory and warehouse stocks at the end of May, 1947 totaled 49,315,000 pounds, an increase of 2,920,000 pounds over the total on hand at the end of April, and an amount very close to the 50,000,000 pound level which was regarded as a safe reserve during the war period.

DCAT Fall Meeting

THE Drug, Chemical and Allied Trades Section of the New York Board of Trade is resuming its Fall meeting which was eliminated during the war years. The meeting is to be opened at Shawnee Inn, Shawnee-on-Delaware, Pa., with an informal cocktail party and buffet supper on the evening of Wednesday, September 24, and it will close on Friday evening, September 26, with the installation of officers, which is now being combined with the annual meeting.

Drug Exports Multiply

EXPORTS of drug and medicinal preparations are expected to total $180,000,000, and possibly $200,000,000 this year, against a total for 1937 of only $18,000,000, according to T. W. Delehanty, associate chief of the chemical and drug division of the Department of Commerce. Mr. Delehanty indicates that there is no reason to believe that the peak in exports of drug products will be reached this year since the potential foreign market for American drug products is vast when viewed realistically.

Penicillin from Seaweed

EXPERIMENTATION in the production of pencillin from seaweed is taking place at Vlake, Holland, where a laboratory has been established for this purpose. The project has also the objective of processing seaweed for use as cattle fodder.

Pepsodent Introducing Hair Tonic

PEPSODENT is entering the hair tonic field with the introduction of Trim on the West Coast. The product will be launched with a one-cent sale, two bottles of the sixty cent size being sold for sixty-one cents.

HOW TO START A COSMETIC BUSINESS

By FRAZER V. SINCLAIR

THERE is a widely held illusion that it is easy to succeed in the perfume and cosmetic business. Each year brings its large quota of intent individuals who are nearly always totally ignorant of the industry, and nearly always sure that they have an idea or a product that will quickly sweep them to fame and wealth.

It rarely happens that these people can be found in industry's circles by the end of a year. They have discovered, and paid for the experience, that the marketing of perfumes and cosmetics requires fully as much competence as does the marketing of the products of any other industry. Perhaps they have discovered that certain branches of the industry require a distinct flair.

Newcomers enter the industry with hopes usually based on four types of products. These are: (1) The gadget (2) The famous name product (3) The exotic, or historical romance of a secret formula (4) The great scientific discovery.

Unfortunately, both American women and retailers are strangely reluctant to enthuse over products of this kind.

Gadgets are not liked. Some clever contrivances have had a brief period of exciting promotions. The subsequent thud has been just so much heavier. In 25 years the industry has added very few products that could have been termed gadgets in their introduction. I can't think of any.

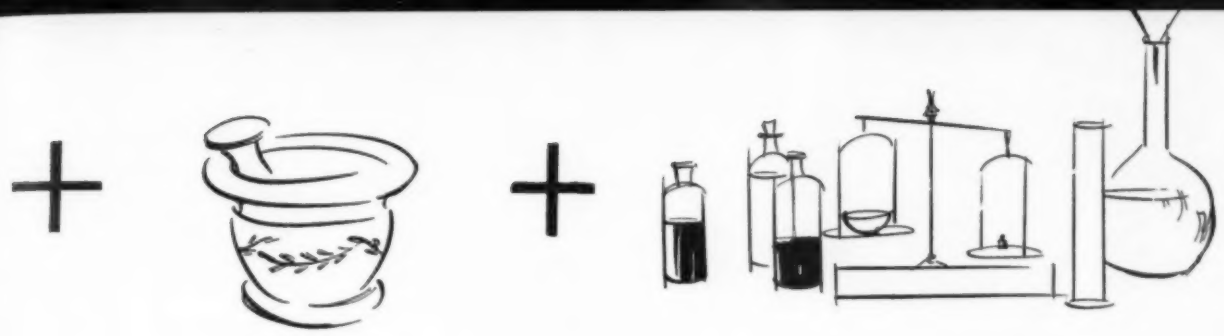
The famous name is the most persistent illusion. It seems that anyone who shows great gifts on the stage, in Hollywood, as a dress or hat designer, or in many other vocations, must automatically also be endowed with equally great gifts in perfuming or in cosmetic treatment.

Unfortunately, neither the public nor retailers feel this way. They watch with justified suspicion for the famous name to show competence in producing a superior perfume and cosmetic, and for competence in marketing it. A few have shown this competence and are among the successful companies of today. But the galaxy of glamour which flits briefly across the cosmetic scene are far more numerous.

The exotic, the historical romance with the secret formula are also persistent illusions for perfume and cosmetic success. Apparently there is a bold, never ending search to gratify woman's romantic dreams. Pioneers have penetrated the most inaccessible part of the Himalayas to rob a lamasery of the secrets of youth; the tomb of Cleopatra's handmaiden has been ravished to find and test the beauty secrets of the queen. The diary of a Roman matron, replete with beauty formulas, has been recently discovered; every famous crowned head in Europe for five hundred years has contributed, usually through descendants of the court physician, who reluctantly yield the priceless formulas.

But the public and retailers are very cynical. They know America is far advanced in the technique of cosmetics. There is nothing at all juvenile in a woman's attitude toward either perfumes or cosmetics. Exotic and historical romances rarely get by the first retailer.

The great scientific discovery seldom has any research behind it; it usually turns out to be an inspiration. Observation plays a great part. An attending physician at a famous prison may observe the new rosy complexion of the inmates who are given some form of sulphur for, let's say, arthritis. Or, an observer notices with awe the mellow skin of an ancient turtle.



Here also the variety is endless, and the cynicism of the retailer and the public has been well fortified by past experiences.

This doesn't mean that legitimate research and new technical discoveries have no place in cosmetics. On the contrary, research has more than justified its value in cosmetic development. New products, offered on the basis of new scientific principles, must be prepared with facts, and better still, clinical evidence, to run a gauntlet of definite retail resistence.

But new enterprises do succeed, and a large part of the steady, admirable growth of the industry during the past twenty-five years has been due to the vigor and imagination of these individuals. For this reason, it is interesting to observe a sort of pattern of success in a few of these companies.

Revlon is without question the most brilliant success in the industry during the past ten years. This company started with no advantages in capital or experience, and with only minor advantages in product. But the Revsons did have an idea—an idea so big that in a few years it revolutionized cosmetic thinking. Instead of selling lacquer, they offered the public color and fashion.

Two other newcomers of this period show another basis of cosmetic success. Alfred McKelvy and John Moore started Seaforth and Sportsman. Above all, this was a theme—a theme that might be described as a masculine, escapist appeal, superbly acceptable to women gift buyers. It is true that the packages had immediate and favorable acceptance, but essentially these packages supported and visualized the theme that brought conspicuous success.

The package itself may create a theme and in no case has this been so successfully demonstrated as in the beautifully executed packaging of Early American Old Spice by William Schultz. That the timing was perfect, coinciding with the peak of American interest in early American culture, only gave greater impetus to this great cosmetic success.

The quiet growth of Mary Chess to one of the industry's most admired successes must primarily be attributed to the skilled tactics of Mrs. Robinson in building a pattern of distribution that caught the interest and brought the cooperation of leading retailers. The products are excellent, the packaging distinctive and beautiful. But beyond that, the one feature which gave personality and character to this company has been its pattern of distribution.

Endocreme is an excellent example of how a scientific discovery, applied to cosmetics with plenty of factual data, can establish a success on this basis alone. The rugged refusal of Robert Rheinstrom to submit to pressure and cynicism has added personality to the company.

From these few examples it seems clear that a cosmetic product and a cosmetic company, to succeed, must establish from the beginning a distinctive personality that has cosmetic sales appeal. This personality and sales value may be: (1) an idea (2) a theme (3) a package (4) unusual scientific or cosmetic value.

It is rare that a package alone can give permanent success. An idea, a theme or a new cosmetic value (cake make-up) gives every opportunity for competent marketing to build a success.

Without this distinctive individuality the new-

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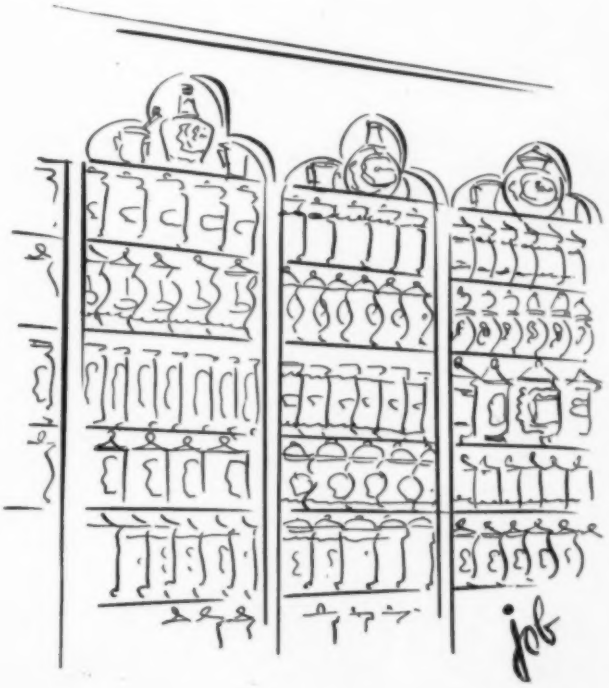
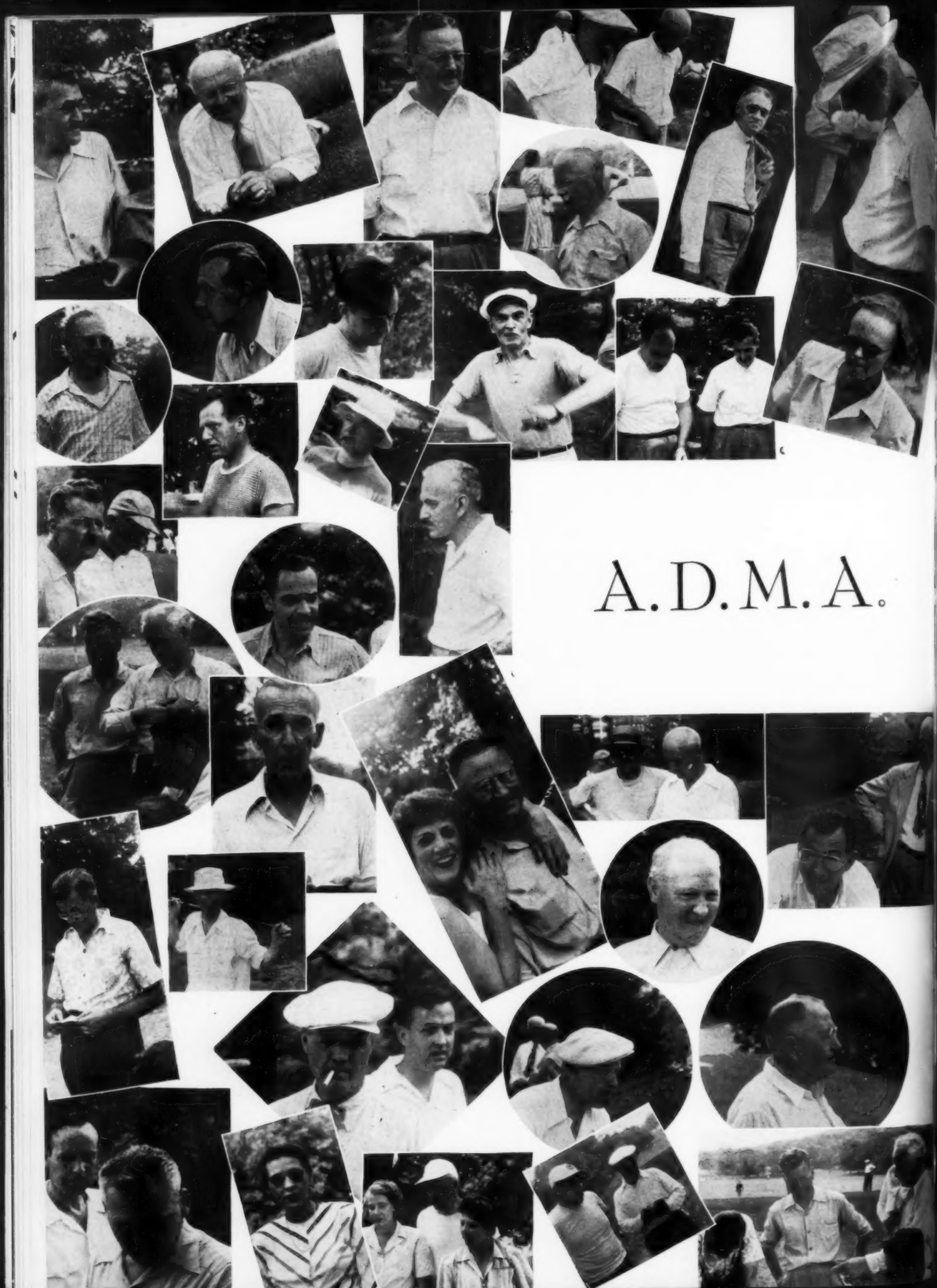
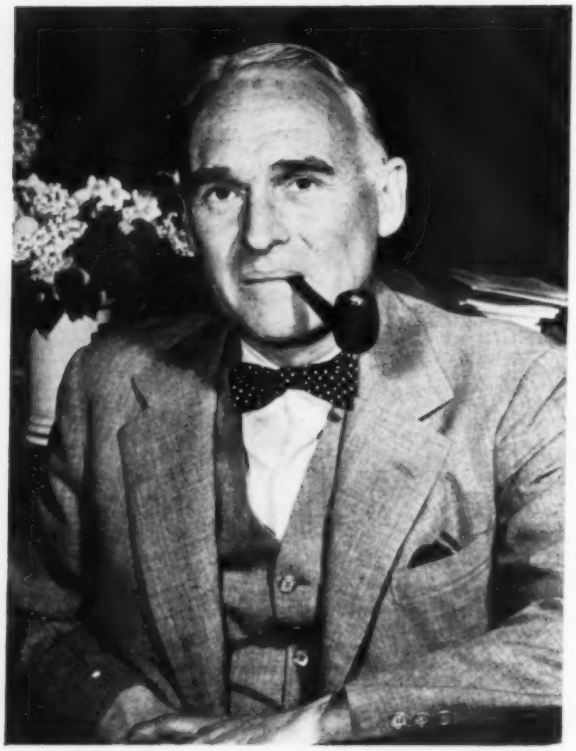



A.D.M.A.

MEETING



A. D. M. A. MEETING

IN OPENING the thirty-fifth annual meeting of the American Drug Manufacturers Association at Virginia Hot Springs last month, Association President John S. Zinsser looked ahead to still greater acheivements in medical science than those of the wondrous immediate past. Saying that "there may be some who would challenge this outlook," he continued:

"They might argue that we have just completed an era in which the pharmaceutical and medical sciences have outdone themselves. With justification, they could point to the wartime developments in blood plasma, the sulfas, the antibiotics, anti-malarials, new and better biologicals, and a host of other dramatic advances.

"Penicillin, streptomycin, tyrothricin are mere beginnings in the field of antibiotics. Subtilin, bacitracin and tomatin may soon break forth from the laboratory. And there will be other antibiotics—developments that are only gleams in the eyes of medical and pharmaceutical scientists.

"Broadly speaking, our most significant advances to date have primarily been in the fields of pain relievers, germ killers, stimulants, suppressive drugs and substitution therapy. More recently we have scratched the surface on allergy and some other fields.

"But science can pause no longer than a mere moment to reflect on the glory of these past developments. New uses, better dosage forms and improved methods of administration are constant challenges to the pharmaceutical scientist. We are still finding out things about some of our oldest therapeutic agents—I wouldn't even be surprised to see some of our almost discarded drugs return to new repute.

"And far beyond the developmental work to be done in fields where we have already made good starts, there remain the seven major problems of medicine as recently listed by Dr. Morris Fishbein, editor of the American Medical Association Journal. Predicting that prospects for their solution in the near future are 'good', Dr. Fishbein listed the following medical problems:

• "Heart disease; cancer; virus diseases, including infantile paralysis and the common cold; atomic radiations as they affect humans; effect of extreme altitudes and speeds on pilots; degenerative disease of the nervous system; and neuro-psychiatric problems created by high-pressure civilization.

"And I might add that adequate solutions to several of these problems might mean the difference between life or death *not only to individuals but also to our nation itself and even our whole civilization.* Rapid strides are being made indetermining the application of nucleonics to medicine; but we must do more than determine the diagnostic and therapeutics potentials of atomic energy —conversely, we must prepare to meet the threatened health ravages of atomic warfare."

With respect to the cost of research conducted by pharmaceutical manufacturers, Mr. Zinsser said:

"We make grants to colleges, universities, research organizations and hospitals engaged in pure research. We underwrite research in our own laboratories. Very often we pay the full cost of clinical testing, developmental and control work. For a variety of reasons, by and large our pharmaceutical companies are somewhat modest about divulging the extent of their contributions to scientific research in all of its phases. This is understandable in an industry where research is so closely related to the basic economic fabric.

"However, a combination of unusual circumstances, including the last vestiges of wartime controls, has provided us with at least part of the industry's research bill on streptomycin. We know that 11 pharmaceutical companies contributed over $1,000,000 in less than a year to the basic clinical evaluation of this drug. This was done by grants to a National Research Council committee under the direction of Dr. Charles Keefer of Boston. After this program was finished, a similar group pledged themselves to spend another $1,000,00 in six months to determine the value of this drug as a a treatment for tuberculosis—a project supervised by the Trudeau Society, the medical arm of the National Tuberculosis Association.

"This $2,000,000 clinical budget for 18 months doesn't include the money spent for other types of research necessary to bring this drug from Dr. Waksman's test-tube to the patient's bedside. The drug is relatively hard to make—developmental research has already paid off in increased yields and reduced prices. Control chemists had to start almost from scratch to work out precise new tests for this 'miracle drug.'

"Of course, all this research expenditure had the dual purpose of advancing medical science and determining the market potential for a new discovery. Pure research, wherever carried on, is sterile without its commercialization and the complete world-wide distribution of its fruits which become the doctor's tools."

With regard to seeking sources of raw materials for drug products, Mr. Zinsser spoke of insulin:

"Before insulin, a person of 30 with diabetes could expect six years of life at most. Today, according to the Metropolitan Life Insurance statistics, the diabetic has a life expectancy only slightly less than the average for all citizens. We not only keep our diabetics alive—they live normal lives and have children. This means that our diabetic population is constantly on the increase and some day the demand for insulin *may* outrun present sources of supply. Though we are far from that situation today, pharmaceutical industry executives and scientists have already tackled the problem. They are seeking new raw materials, new sources of pancreas—the present raw material, and new processes for getting greater yields from available raw materials. In addition, they are interested in research—though not promising yet—leading to synthesis of an insulin substitute.

"Perhaps this happy combination—this judicious mixture of industry and public health—represents the best very in our modern capitalistic, democratic society. But at the same time, pharmaceutical management must pay its employees, provide incentives for its executives and profits for its stockholders and owners. The profit motive provides the money to do all of this—to undertake the research and development so necessary to the advancement of science and human welfare."

In the report of the Legislative Section, Leslie Harrop, chairman, drew attention to the recent discussion over nomenclature. Said Mr. Harrop:

"During the year, the Association, together with other invited manufacturing organizations, met with the Council on Pharmacy and Chemistry of the American Medical Association to discuss, first, the revised rules of the Council and, later, the matter of warning legends on prescription labels. Following these conferences, the Council rules were again modified to eliminate the words 'proprietary name' and to substitute the words 'protected name' to denote trademarks. Along this line there seems to be a rather determined effort in some quarters during the past year to argue over nomenclature. It has been stated that the word 'ethical' is as obsolete in the drug field as the words 'patent medicine'. It matters little what terms are used. The British distinguish an amateur from a professional golfer, in press reports, by calling the amateur 'Mister'. In this country, where we democratically do not have first, second, and third classes for train travel but do offer Pullman service to those desiring it, we have followed a similar democratic method of distinguishing amateurs from professionals by placing an asterisk after the name of the amateur and then at the bottom of the column stating that it denotes an amateur. Call it what you wish and twist the words as much as you can, the distinction that is sought to be avoided by these arguments is just as much present whether you denote the difference by Mister or with an asterisk, or whether you call it first, second, third class or Pullman, or ethical drug or patent medicine. We know, and the people who advance these arguments know, that the differences denoted by the word 'ethical' are real and substantial. It behooves us to see that this distinction remains clear."

With reference to warnings on prescriptions labels, Mr. Harrop said:

"As to warnings on prescription labels, such as the one required by the Food and Drug Administration on thiouracil, it should be first reported that no definite position has been announced by the Council to date. In the next breath, it seems necessary to review and discuss at this point the Sullivan case. If the present decision prevails, there would appear to be no lawful means for a Food and Drug requirement."

Association Executive Vice-president and Secretary Carson P. Frailey, in describing the activities of the Association said that "In my work over the years, I have noticed that trade associations and industries—like people—develop distinctive character with age. To a great extent the character of a trade association is a composite of the individual characters of its membership . . . Actually, the number of matter on which the Association—as such—can take a positive, vigorous and public stand are somewhat limited by the inherent nature of trade associations. Broadly speaking, such stands are restricted to those relatively few matters that can be described as involving a least-common-denominator interest of the whole membership.

"In pursuing our policy, we have been exceedingly fortunate in having officials at the head of the Food and Drug Administration, the Bureau of Narcotics, and the U. S. Public Service, our primary sources of government regulation, who understand that men of goodwill can engage in a vigorous controversy without carrying over any bitterness after the situation has been settled."

The Association reelected as president John S. Zinsser, of Sharpe and Dohme, Inc., Philadelphia, and also reelected the following other officers: first vice-president, Robert Lincoln McNeil, McNeil Laboratories, Philadelphia; second vice-president, Carleton H. Palmer, E. R. Squibb & Sons, New York, third vice-president, Donald S. Gilmore, the Upjohn Company, Kalamazoo; treasurer, M. C. Eaton, Norwich Pharmacal Company, Norwich, N. Y.; executive vice-president, Carson P. Frailey, Washington, D. C.; general counsel, Leslie D. Harrop, the Upjohn Company, Kalamazoo.

The Future of American Drug and Chemical Exports

By EARL I. McCLINTOCK*

In this paper Mr. McClintock has pointed up, clearly and concisely, a major problem of the future of our economy which is puzzling some of the best business minds of this country.

THE future of exports of drugs and chemicals is inextricably tied in with the future of exports in general. The future of exports in general depends to a great extent on the policies of our government.

It took twenty years and the devastating Second World War for the United States to throw off its policy of *political* isolation: but it has not fully matured, as yet, in its international fiscal concepts and economic policies.

Before the First World War, the United States was a debtor nation. Its resources had been developed with the aid of foreign capital; many hundreds of millions of dollars had been loaned by overseas investors to build our railroads. Service on foreign-held bonds, returns on stocks and investments, remittances to the home folks by the immigrants, spending by American tourists, and payments for services such as sea freights, insurance, etc.,—all created sizable dollar balances abroad to be used for the purchase of American goods.

During World War I, we furnished the allies with arms and supplies and, billions of foreign-held securities were thrown on our markets to pay for them. Also, billions of dollars were (shall we say) loaned to foreign governments, so that when the shooting was over, the United States found itself no longer a debtor, but a creditor, nation.

It was obvious that neither our financial nor our political leaders grasped the fact that the economic policies of a creditor nation must of necessity differ from those of a debtor nation; that since we no longer exported dollars in return for *capital* invested here or for services bought by us abroad, or otherwise, we had to send dollars abroad for merchandise—in other words, we had to import and pay for those imports to provide dollars for the purchase of our own export products abroad. The only other alternative is to *lend* dollars. Our financiers adopted that alternative and, during the 1920's sold to American investors more than fifteen billion dollars in foreign securities. All went well with business as long as these dollars lasted. When they were exhausted, the inevitable crash came. We all recall 1929! Most of our American bankers are not international traders, and it is time that they learned the art.

A bad situation was made infinitely worse by the enactment of the Hawley-Smoot Tariff Act of 1930. This law effectively cut down our imports and inevitably reduced our potential exports. The demand during the 20's for payment in gold drove England off the the gold standard and resulted in drawing all world's gold to the United States. Before the first war, when England was the financial center of the world, business was done through balancing bills of exchange, and there

*Vice-president, Sterling Drug, Inc.
Delivered before DCAT Section, New York Board of Trade.

was very, very, little movement of gold. If one million dollars in gold was paid by one country to another, it was almost a subject for newspapers headlines.

Unless our political and financial leaders realize that the export markets are essential to the prosperity of the United States, and that the only sound way to develop exports is to develop imports as well, then we shall certainly repeat the experience of the 20's.

It is estimated that exports in 1947 will be 16 billion dollars, with imports of less than 8 billions. Such a situation is dangerously unsound.

There is a false conception that the import of necessities means the ruin of American industry and the laying off of great numbers of workers. The prevalence of such a belief in itself shows that no really intelligent study has been made of the subject of imports.

The late war taught us that many of the best customers for American goods could furnish products that we had never imported, but which we could use, not only without competing with our own domestic production, but in creating new industries. The wealth of the exporting country was increased, dollars were made available for American goods, and our own economy was helped—and not harmed.

Our Department of Commerce should make a thorough survey of not only how these war time imports can be expanded, but how a place for additional imported products can be found here. Such a survey should not be supervised by Government employes, but should be directed by some competent industrialist experienced in exports.

In addition, American companies engaged in export should do some investigation along these lines also. It must be remembered always that United States exports depend fundamentally on United States imports.

The war has stripped us of many of the natural resources that we had considered as inexhaustible. Copper and lead are just two examples of such products. Iron ore and petroleum are quickly becoming two other possibilities. This means that such products must be imported in the future in order to meet even our own domestic needs. These imports will furnish dollars to pay for exports. The recent removal of the four cent duty on imports of copper showed at least a beginning of awareness of a changed situation, and was a step in the right direction.

The Hawley-Smoot Tariff Act, which throttled free international exchange of goods, did more to foster nationalism and the desire for self-sufficiency everywhere than any other law adopted by any country at any time. A liberal import policy by the United States will do more to break down the present trend toward nationalism than any other single thing we could do. Intelligent handling by our government of this entire problem, and the development of markets for additional *imports* is the only hope for a permanent *export* market for all our industries, including drugs and chemicals. The free exchange of goods between nations is the foundation of permanent peace. Without it there can be no peace.

In the drug and chemical industry, aside from the general, we have our own particular export problems in addition.

The great development in American chemistry began with the end of World War I. In 1939, the industry was just beginning to feel its way into foreign markets. Prior to that time American exports of drugs and chemicals were unimpressive. There is no doubt that Germany monopolized this field of foreign trade. In fine pharmaceuticals and chemicals there were sizable Swiss and French exports. Since the war and up to the present, the Germans have been out of the export field and the growth of the American drug and chemical exports has been phenomenal. The question is, how long will this last? The French are not yet back in the field to any great extent and the future of their trade is as uncertain as the future of France itself. The Swiss are very active in export. Britain, in the past, had no drug and chemical industry of any note. The needs of war forced them in this field, with the result that today, for the first time, England's pharmaceutical and chemical industry is becoming a factor in export. I have no doubt that our own industry can successfully meet competition from England, Switzerland and France: but we are confronted with the possibility of again having to face German competition due to an apparent change in policy of our own government as far as the German chemical industry is concerned.

The policy of our government and that of Britain, too, seems to be to build up German industry in order to make the British and American zones self-supporting. To get the necessary dollars to pay for food, means exports; and a substantial amount of these will be exports of drugs and chemicals, as before the war. It should be borne in mind that during the war—whether by the grace of God or by reason of deliberate policy—many of the pharmaceutical and fine chemicals plants of the German cartel were not destroyed by bombs—as a matter of fact, many were not even touched. Most of these plants are in the American and British zones. And they are working at top speed. Germany certainly can not consume all this production—it did not, even before the war—so it will naturally be pushed into the export market.

Thus we now have the spectacle of America and Great Britain working to rehabilitate the German chemical trust with its tentacles reaching out into every country of the world. This is a great challenge to American exporters of drugs and chemicals. If we are to judge by pre-war experience, their export prices will be low; if not now, then soon. What we don't know is whether the high level of German efficiency and relatively low wage scale will prevail in the future. This competition is serious, particularly in our field, because German products in our line were well and favorably known under German trade-mark names throughout the world.

During the war our Government did all in its power to destroy the German trade-marks in countries within

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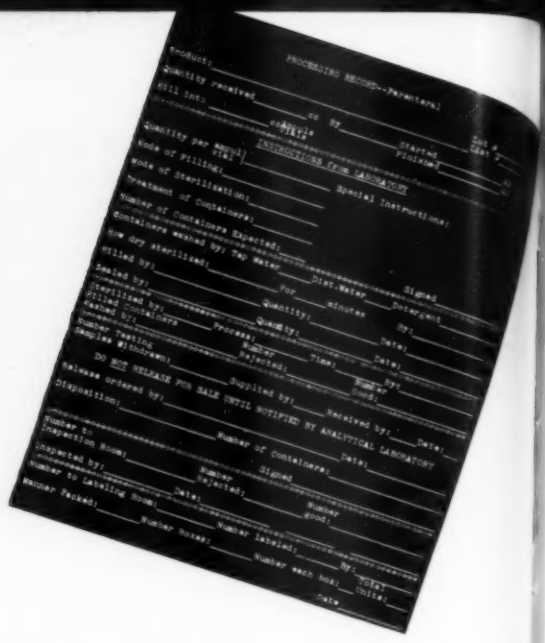
CONTROL PROCEDURES

By ERWIN DI CYAN, Ph.D.


PROCESSING RECORD--Parenteral
INSTRUCTIONS from LABORATORY
Special Instructions:
DO NOT RELEASE FOR SALE UNTIL NOTIFIED BY ANALYTICAL LABORATORY

CONTROL procedures in pharmaceutical and cosmetic plants comprise the ability to govern the various stages of production from the raw material to the finished product, and the ability to retrace the manufacturing history, at any stage of production. A good control method is only as good as its records, and one of its hallmarks, is the ability to reconstruct from its records, each stage of the manufacture of a product, without recourse to memory or personal impressions. The human element in a satisfactory control procedure should be limited only to careful observation, and precise recording.

The necessity of control methods in the production of any commodity, may have its reason in legal, moral, social or economic considerations. In the case of drugs or cosmetics, all of these basic reasons for a control method exist. Over the legal requirements of adequate control, the Food & Drug Administration has jurisdiction. The moral and social obligations are apparent in the case of commodities, such as drugs or cosmetics, since the consumer puts trust into them for the preservation of his health in the case of drugs, and for the enhancement of his esteem in the case of cosmetics. Both are equally important in achieving a dynamic balance of today's living. The economic considerations apply in any type of manufacturing: proper control procedures reflect the state of things, so that

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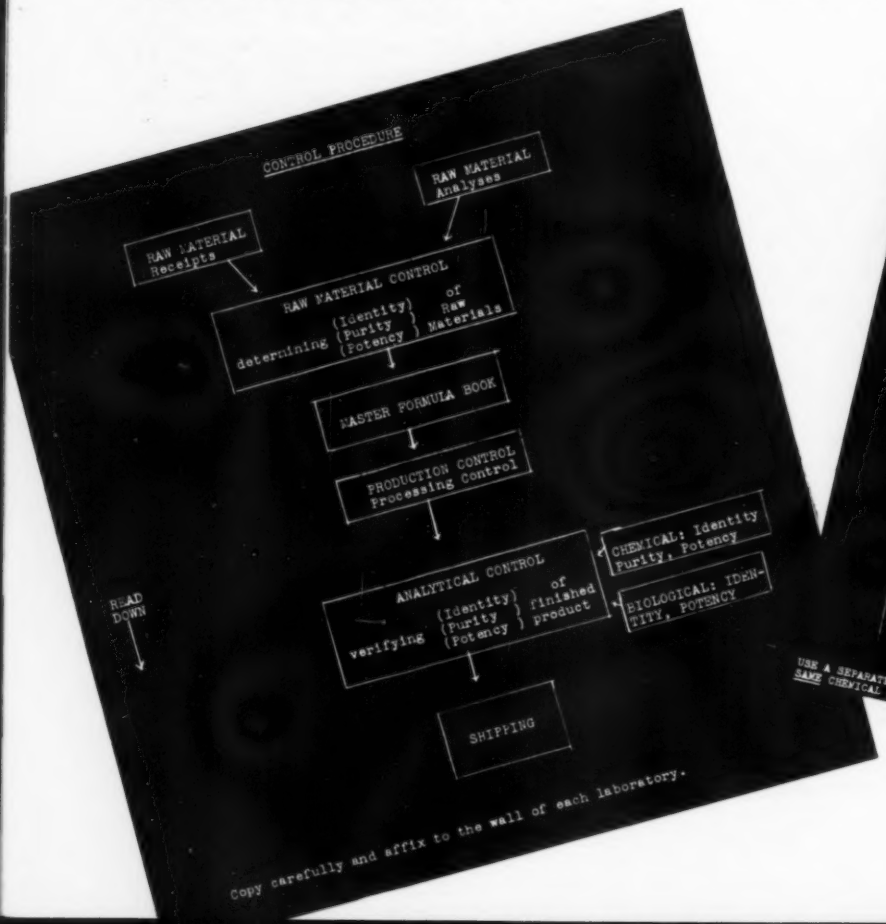
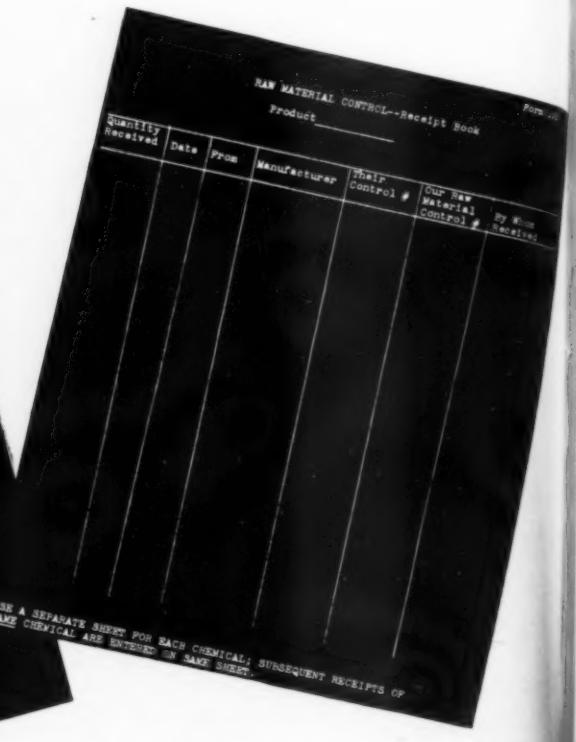




in estimating the true cost of manufacture, variations in operation may be instituted. These often lead to an improved product or a reduction in cost.

The simplest control procedure may be the reading of a label to assure oneself that the ingredients used are those intended. The steps in an elaborate control procedure may be almost infinite. The answer lies between these two extremes, for a proper control depends upon an evaluation of an individual problem. Because of this elasticity, control procedures do not lend themselves to dogma, but the elements which make a good control procedure are readily apparent. These elements are (1) feasibility, (2) workability, (3) informativeness, and (4) an unbroken chain of records, which constitute the prime bases upon which every control system must rest. In order to achieve them, various steps are taken, which must be congruent to the procedures they cover.

CONTROL PROCEDURES

(Continued)

The application of statistics constitutes a valuable means of setting down the prerequisites of a satisfactory control procedure. Accepting the sampling error* concept, equating the standard error into probable error, measuring variations and determining the standard deviation do help to quantitate the facts; any or all of these factors, may be, or may not be necessary in a given control procedure.

However, a necessity exists for fitting an appropriate method of solution to a control problem. A "goodness of fit" must be present. This would include certain

*The term "error" is used here in the statistical sense; it is not synonymous with "mistake," but connotes the natural limitation of a method. In analysis, it indicates the departure from precision due to the limitation of sensitiveness of a test. In statistics generally, it connotes the inevitable play of chance related to the theory of probability.

(*Continued on page 118*)

FROSTBITE

By M. A. LESSER

The growing popularity of winter sports has brought with it the problem of frostbite. It took many years to teach people the dangers of sunburn. A similar educational job may be needed concerning exposure to cold. Aside from the danger and discomfort of frostbite itself, people should be warned that a simple attack of frostbite may be the forerunner of Raynaud's disease, allergic sensitivity to cold, Buerger's disease and hardening of the arteries of the extremities.[1]

Information gathered during the war has upset many of the old views concerning frostbite. With American troops fighting in Alaska and in the cold hills of Italy, knowledge of frostbite became imperative. Thus it is not surprising that research into the causes, effects and prevention of frostbite got under way early in the war.

Airmen, returning from high-altitude flights over Germany, were being disabled for months or even permanently grounded by frostbite injuries.[2,3] On the ground, troops were being incapacitated by the cold-induced condition known as "trench foot."[4,5] On the high seas, shipwrecked men were suffering from "immersion foot."[6,7] Even civilians in England, seeking protection from bombs, fell victims to the cold-caused condition called "shelter foot."[8]

Citing the classification used by the U. S. Army Medical Corps, Leigh[9] explains that trench foot is a diagnostic term describing the cold injury resulting from prolonged exposure to just above freezing temperature. It occurred almost exclusively in combat infantry riflemen made immobile by enemy action. Immersion foot designates the cold injury resulting from prolonged exposure of the feet to cold water. Frostbite is the term employed to describe the injury resulting from exposure to below freezing temperature, whether it appeared in ground forces or in combat air crews at high altitudes.

Despite the difference in causal elements, there is a notable tendency to class all of these conditions as frostbite.[12,13] In this connection Brownrigg[14] has remarked that, "all lesions resulting from exposure to cold are essentially similar. The term 'frostbite' is adequate to describe them regardless of the circumstances under which they occur." To this might also be added the observation that trench foot, immersion foot and shelter foot are conditions seldom encountered under normal circumstances, while frostbite is all too common in certain areas. Nonetheless one cannot overlook the fact that the study of these several conditions has yielded much valuable data on the injurious effects of cold on the body and the means for preventing or treating these effects.

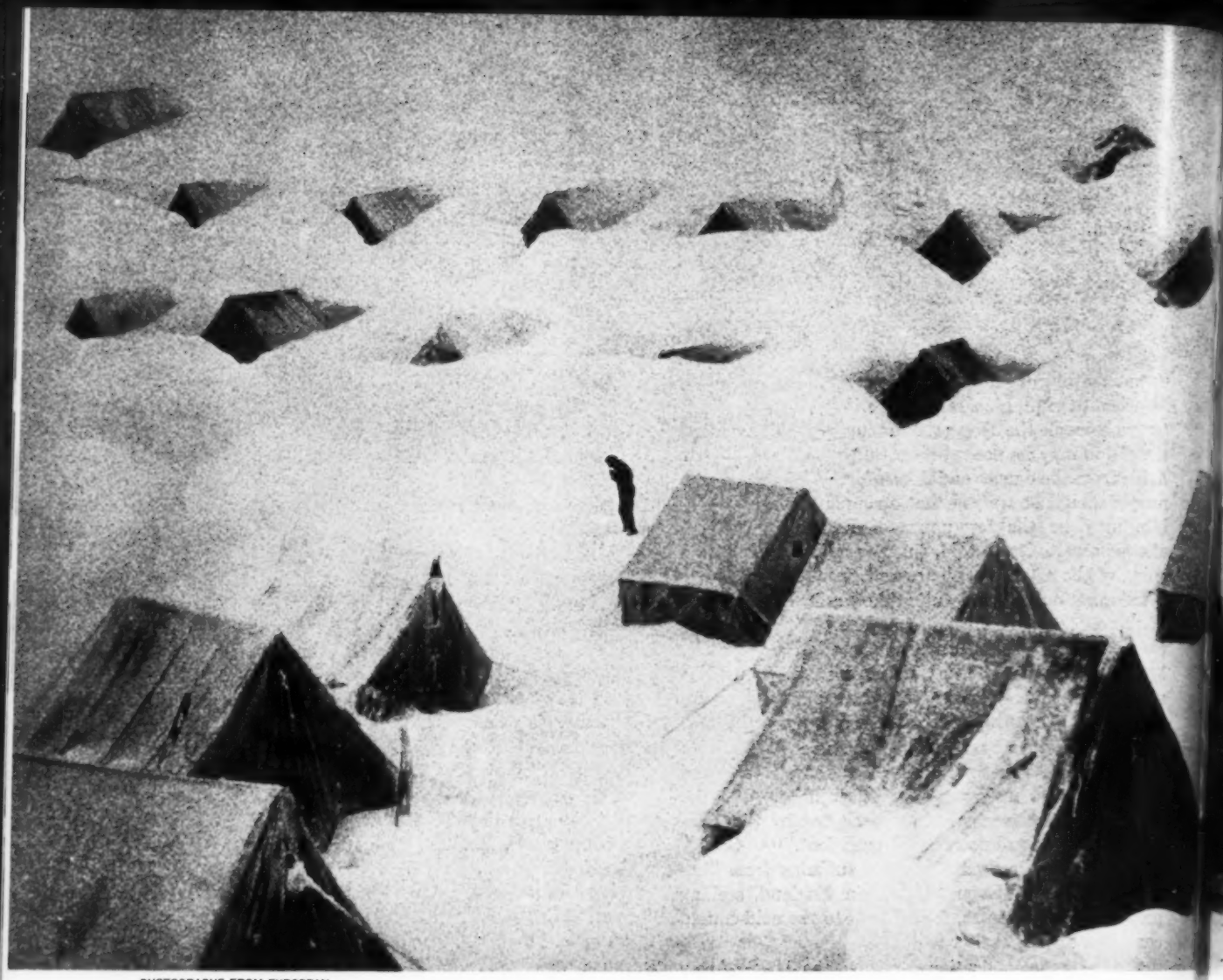
The skin, when exposed to low temperatures, turns pale; this being caused by the contraction of the capillaries venules and arterioles. After longer exposure, the color changes to red, then to marble, and finally becomes cyanotic. This last dangerous state results because the extreme contraction of the blood vessels does not permit oxygen to reach the capillaries which supply the skin.[4]

A temperature of 50° F. or lower gradually benumbs the skin. Fine touch and ultimately all touch and pain sense are lost. The muscles of the extremities, especially those of the hand, become weaker because of cooling of the muscles and motor nerves. This interferes with local movement, and function of the member is seriously inpaired.[15] According to Lewis,[16] the true freezing point of the skin is between 28.5° and 32° F. He further observed, however, that freezing of the skin rarely occurs at the true freezing point because of the phenomenon of super-cooling. This is the ability of the substance to withstand temperatures below its ordinary freezing point without solidifying. This effect differs in degree in different skins and in different areas of the same skin. Soaking the skin in water will abolish the capacity for supercooling. Frequent bathing produces a skin which will not supercool very well. Certain oils, such as whale oil, cod liver oil, olive oil and castor oil, when applied to the skin give it the capacity to supercool.

Taking these factors into consideration, Lewis found that freezing usually occurs between 25° and 14° F. Frostbite occurs most commonly at temperatures below 14° F., especially when a moderate to strong wind is blowing. As is well known, exposing the skin to cold metal will produce freezing at higher temperatures.

The Russians,[17] who naturally have a deep interest in the subject, have overthrown a number of old and generally accepted views concerning frostbite. For one thing, they discovered that water in the body does not turn into ice crystals before frostbite occurs. They felt that this work points to the error of the popularly accepted theory of gradually warming frozen areas by immersion in ice water. The whole body or the part immersed in cold water would not be warmed, but would be increasingly chilled.

As noted by Girgolav,[17] another fiction which has prevailed in textbooks is that frozen parts of the body, such as the nose, ears, fingers and toes, are unusually fragile. However, he states that up to the present time no one has seen any portion of the body break off spontaneously. A great number of experiments carried



PHOTOGRAPHS FROM EUROPEAN

out by Russian investigators on human corpses and animals disclosed no such fragility. For example, a frozen frog may be thrown forcibly on the ground without breaking anything except an occasional toe.

In the older systems, the amount of injury caused by frostbite was classified, like burns, into first, second, and third degree. Newer classifications are based on a sharper graduation. According to Liebesny,[4] the following types of frostbite may be distinguished: (a) erythema and edema; (b) blisters and bullae; (c) superficial gangrene; (d) gangrene of the skin are subcutaneous tissue; (e) gangrene of a whole part of an extremity or other parts of the body; and, (f) injury to muscles, tendons, periost, bone and nerves with or without accompanying lesions of the skin.

The degree of injury is observed during the thawing process, which is the period of greatest danger. As explained by Bankert,[15] during thawing a red area surrounds the involved region, gradually invading it until the white skin becomes red. In moderately severe frostbite, the redness and swelling of the involved region, as well as the tenderness and pain on warming, usually occur on the day after the individual was frostbitten. In milder cases, the skin often peels and may remain pigmented for months. With moderately severe frostbite a blister may form and there may be burning pain. If the frostbite is severe, necrosis occurs and there is extravasation of whole blood into the tissues, with the result that the skin becomes darkened.

The sudden production of edema under pressure during the thawing period is responsible for much of the serious damage caused by frostbite. Not only does this edema cause separation and splitting of tissue substance, but it also interferes mechanically with the blood supply in such a way as to cause local tissue anoxia and gangrene. At this stage it is difficult or impossible to determine how much living tissue is going to show up underneath. Later on the black, dead skin peels off and may reveal healthy, fresh granulation tissue, with newly formed skin, or there may be a dry gangrene extending down to the bone.[5]

In severe cases, thrombosis or clogging of the blood vessels is common. Reports from the Surgeon General's Office[3] reveal that extreme or prolonged cold tends to

FROSTBITE

(Continued)

These pictures are of United States troops wintering in Iceland where they fought a continual battle against the snow and wind of storms from the North Atlantic.

clot red blood cells so that they plug the circulation. This eventually results in development of gangrene and loss of limbs. The Russians[17] have also found that the course of necrosis is determined primarily by interference with or eventual complete stoppage in blood circulation. On the basis of extensive studies, Lange and his associates[18] feel that therapeutic attemptes to avoid gangrene after frostbite must be started before the stage of thrombosis is reached.

In mild cases, there usually is complete recovery from the effects of frostbite. In more severe cases there may be recovery with residual neuralgic pains, joint pains, hyperesthesia (excessive sensibility to touch or pain) or sensitivity to cold. As already mentioned, many of these frostbite victims show a tendency in later years toward peripheral circulation disorders. The very severe cases often end up minus fingers or toes as the result of gangrene. Other symptoms, including pain, may also persist.

There has been considerable revision in methods for treating frostbite. As remarked by Bigelow.[5] a few years ago, first aid manuals are contradictory and, in some cases, they impart harmful advice. According to Bankert,[15] the treatment of mild frostbite is simple. When a white patch appears on the face or ears, the victim should cover it with a soft mitten, cease motion and, if possible, get out of the wind. Where feasible, the effected part should be warmed with the uncovered hand. If the hand is involved, it is best to get it as close to the skin of the body as possible by inserting it through the garments or into the trousers in the region of the groin. If the foot is involved, the best thing to do, according to this authority, is to remove the footgear and socks and place the affected member next to the skin of another person. He stresses that warmth greater than body temperature should never be applied.

A very gentle type of centripital massage may be used, but vigorous rubbing is absolutely wrong. If the part is not quickly restored to normal, it should be wrapped in sterile or at least clean dressings, covered loosely but warmly and placed at complete rest. Treatment with tetanus toxoid is important, since it has been shown that tetanus is a common and serious com-

(Continued on page 125)

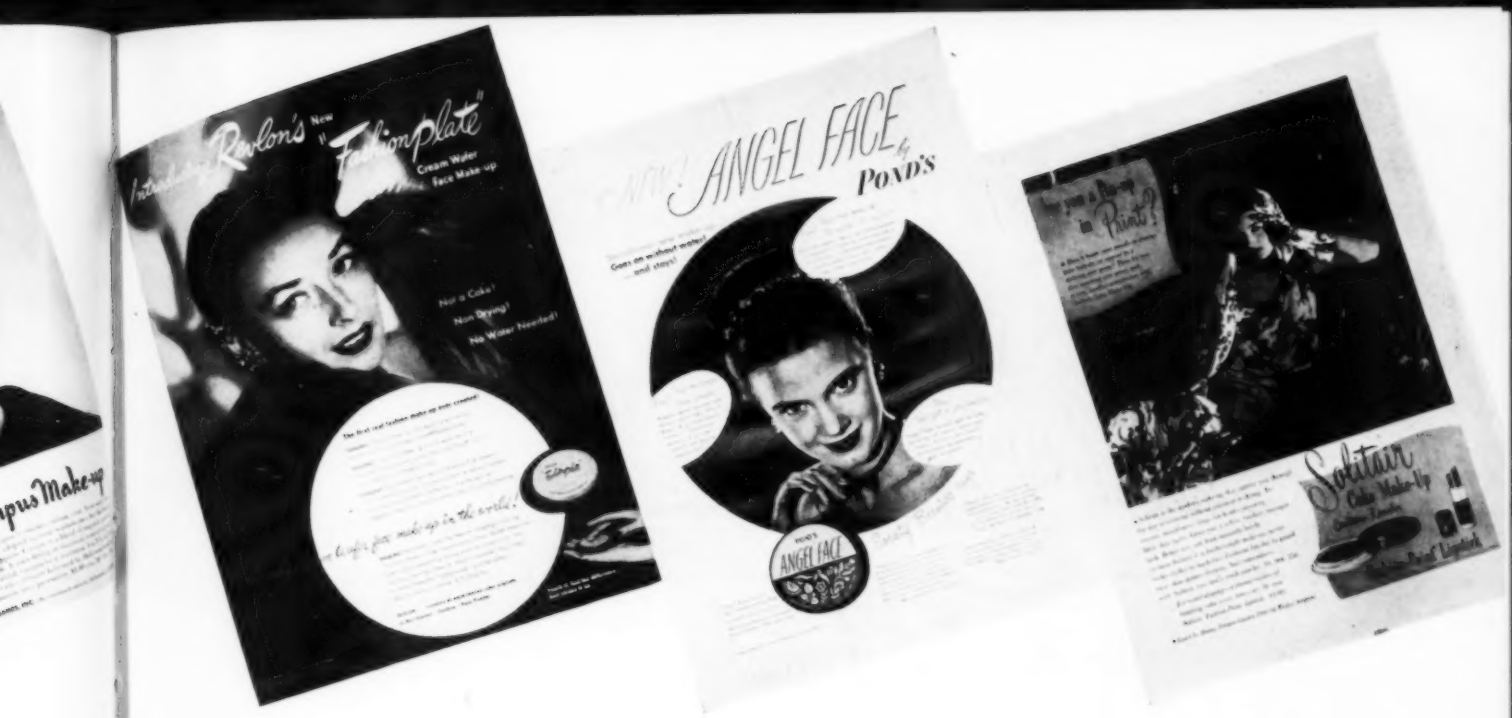
MAKE-UP BASES

By H. HILFER

Cosmetic lines on the market have had included in them one or more make-up bases, because of an increasingly large demand for such products. Their functions vary with the type of preparations, but generally speaking they are all intended to cause a final effect of a smooth "matt" finish on the face. There are several methods by which this effect may be attained, and therefore the differences in the make-up base preparations on the market. Several firms have several different types, in order to service customers who are more partial to one than another another. This is not as ludicrous as it may first appear since the preparations are so varied in their appearance and method of use to produce the desired functional effect.

The different types of bases may roughly be divided into five categories—pigmented creams, pigmented ointments, cake make-up, liquid make-up and the compact powder type. The oldest of these is perhaps the cream, which is not intended for use as a single preparation designed to produce a complete make-up, but as a blender which imparts a thin uniform color film to the face to which may be added face powder to produce the desired effect. None of these creams now on the market have incorporated in them enough pigment and covering agents to allow them to be used as a substitute for face powder as a means of covering small defects. They do, however, serve as a foundation both as a means of causing better adherence of the face powder and as a means of supplying a smooth, continuous tinting effect, both of which are highly desirable.

Generally speaking this type of product is formulated from vanishing cream bases to which have been added pigments and covering agents. Too large a percentage of pigments and fillers cannot be added, because of the danger of an emulsion separation which could take place as a result. One of the better known preparations of this type consists of a vanishing cream of the Glyceryl monostearic type in which has been incorporated a total of 7.5 per cent of pigments and fillers. This method of addition may be by incorporation of the pigments and fillers into a sufficient quantity of mineral oil by means of a roller mill or ointment mill, beforehand, and by addition along with the remainder of the lipoid phase to the aqueous phase of the emulsion in the usual manner. A secondary method would be to make the cream first and then add the pigment and filler and to put the whole through a colloid mill.

Pigmented ointments are capable of having incorporated into them a larger amount of pigments than would be possible in the cream, and therefore, may come closer to a preparation which is capable by itself of producing a finished make-up. The ointment base consists of

mixtures of oils and waxes melted and mixed together into which the pigments and fillers may be ground. The ground mass may then be filled into containers cold, or heated and poured. Mineral oil, Butyl stearic, Isopropyl alcohol esters, are some of the oils used; the choice depending on the viscosity of the oil which is in turn transmitted to the finished product. The lower alcohol esters of fatty acids have a characteristic low viscosity and are now being used in sizeable amounts in these preparations.

The viscosity of the film becomes extremely important in a product of this type. Since a low viscosity material is capable of being spread over a larger area, it follows that the lower the viscosity the thinner would be the applied film. A ratio between pigments and oil would therefore have to be set up which would be dependent on the viscosity of the oil. With a low viscosity oil a greater percentage of pigments and fillers would be necessarily needed since this is the only method by which compensation could be made for a thin film. If a thick filmed ointment is prepared, a lesser quantity of pigments and fillers could be used, but with the danger of having the consumer classify the product as greasy or oily. Products of this type have incorporated anywhere from 20 per cent to 40 per cent of pigments and fillers depending on the desired effect.

The discussion of the ointment make-up may also be applied to another type of make-up preparation, which is similar to the ointment type, but is in a liquid form. The liquid make-up referred to consists of pigments and fillers dispersed in a limpid oil vehicle. The pigments settle to the bottom of the vessel on standing, but are readily redispersed by mild shaking. There are no waxes used in its formulation and a lower percentage of pigments and fillers must necessarily be used because of the necessity of keeping the product freely mobile. In addition it may also be necessary to incorporate a small percentage of a surface active agent such as lanolin, lecithin or others in order to help remove the air which may be incorporated along with the pigments.

The lower molecular weight alcohol esters of fatty acids; mineral oil, and sesame oil have found their way into these products and though there are rancidity problems in conjunction with the use of esters of unsaturated fatty acids, the products seem to be in demand.

The more popular type of make-up base seems to be the cake make-up. Of all the types so far discussed, the cake make-up is the only one which has a ratio of pigment and filler to vechicle where the pigment and filler is in larger excess. It is therefore possible to obtain a film after application and subsequent evaporation of the water of application which is essentially a powder film, containing enough oil for binding and water repellent properties. The cake-make up therefore becomes a face powder which is provided with a vehicle in order to achieve a smooth and continouus film. This same is true of the other preparations discussed above, except for the ratio pigment-filler to vehicle. That a vehicle for the pigments and fillers promotes a smoother and more continuous application may be easily demonstrated by a comparison between paint and a powder consisting of pigments and covering agents. Anyone who has tried covering a surface with a uniform film of powder would know how difficult it is as compared to a semi-liquid or liquid medium. The cake make-up consists essentially of a dehydrated cream base to which colors and fillers have been incorporated, and which is capable of forming a cream by gentle trituration with water. The trituration is accomplished by means of a moist applicator whose function it also is to pick up the cream thus formed and in which is incorporated the colors. After application to the face means of the applicator and blending to produce the desired uniform smooth film, the moisture evaporates leaving

(Continued on page 132)

If it's toilet water...

A selection from our line of stock patterns will solve your packaging problem inexpensively . . . or if you prefer, we will gladly execute your individual design in machine made or hand blown glass. Whatever your choice, if it's a Carr-Lowrey product you are assured of unexcelled quality.

CARR-LOWREY GLASS CO.

Factory and Main Office: BALTIMORE 3, MD. • *New York Office:* 500 FIFTH AVENUE (18) • *Chicago Office:* 1502 MERCHANDISE MART (54)

OPAL JARS • HANDMADE GLASS BOTTLES • MACHINE MADE FLINT GLASS BOTTLES

PACKAGING and SELLING

FAIR TRADE AND PRICES

It was inevitable that the Washington drive for lower prices would arrive at an examination of the effect of the Fair Trade laws. Three Federal agencies are now cooperating in this investigation. The Federal Trade Commission is questioning business men to find out how consumer price levels are fixed, or established, or suggested by manufacturers.

Fortunately, for this industry at least, little or no evidence will be found that Fair Trade prices are in any way out of line with prices of commodities not protected by Fair Trade laws. In fact, the evidence may point in precisely the opposite direction. It is unfortunate that any political examination of the Fair Trade laws should be made on this basis.

This law originally signed by President Roosevelt, with some reluctance and passed by a Congress not at all sympathetic to any such thing as price protection for manufacturers, had two very fundamental purposes in mind, which have been amply justified during the last several years.

Those who remember the pine board stores, the street peddler and the ruthless selling below cost of reputable trade names, to mislead the consumer into entering a store, has no wish to see a return of the old days of the loss-leader. We have ample evidence that at that time this sort of competition was neither economic or constructive and that it was specifically against the interest of the consumer.

It is interesting to note that the branches of the retail trade who are in opposition to Fair Trade, notably some leaders in the department store field, are the retailers who have a high operating cost, which would not permit this price cutting from a profit operation viewpoint, but are the stores whose large volume permits them to take certain losses as a consumer lure.

The smaller retailers, notably the independent drug stores whose limited field of operation contains a high percentage of these loss leaders, will certainly oppose any change in these laws, should they ever get as far as Congress.

This loss leader practice is doubly injurious in an economic sense, because it is only effective when it utilizes the well-known product of a reputable manufacturer. The amount of money which many manufacturers with a fine trade-mark name were compelled to spend to prevent the reckless football ing of their names ran into very considerable sums. The truth is that there never has been any evidence that Fair Trade has increased prices except in the sense that it has prevented the uneconomic and unsound practice of certain retail selling below cost with the obvious intent of misleading the consumer.

In this industry every product under Fair Trade protection faces not only severe competition from numerous manufacturing competitors which set a definite limit on prices, but faces a well informed buying audience in the retail trade, which is perfectly familiar with normal consumer price preferences.

Optimism Sets In

The somewhat dazed expression that appeared on the faces of many cosmetic manufacturers following Christmas seems to be passing. Some of the factors that are even contributing a faint degree of optimism are as follows.

While sales of cosmetics are off in most cases it is not as bad as conversation would indicate. This decline is substantially less than many other types of consumer goods which are rated somewhat in the luxury class, but certainly as essentials in our standard of living. These include liquor, costume jewelry, furs, music store supplies and other consumer commodities.

Whatever home inventories existed that gave the consumer an opportunity to resist for awhile are on the way to being exhausted. For the last few months, certain products that have

Department of Commerce Monthly Retail Trade Report

Retail sales of all kinds in drug and department stores showing the increase for the month of April 1947 as compared with the same period in 1946.

	Department Store	*Drug Store*		*Department Store*	*Drug Store*
Atlanta	−4	+15	Memphis	X	0
Baltimore	−4	−3	Milwaukee	−3	+3
Birmingham	0	+3	Minneapolis	+6	+6
Boston	+6	+3	Newark	0	+5
Buffalo	+9	+7	New Orleans	+4	X
Chicago	0	+5	New York	−2	+6
Cincinnati	+4	+3	Philadelphia	+7	+4
Cleveland	+3	0	Portland	+7	−2
Dallas	−7	+4	Providence	−3	+1
Denver	X	+9	Saint Louis	+7	+7
Detroit	+4	+14	Salt Lake City	+1	+10
Indianapolis	+7	−0	San Francisco	0	+16
Los Angeles	−7	+2	Seattle	−2	−3

struck a new note have shown an excellent sales response in stores.

From the retail viewpoint, things are certainly clearing up. The serious decline in business, which many manufacturers experienced, was a drop in retail buying much more than a drop in consumer buying. This drastic drop in retail buying was not originally influenced by the cosmetic departments. It first appeared in furs, then costume jewelry, and then some parts of the women's apparel field. The resulting inventory jitters brought drastic change from store management, often directed by banking influences, which found its final effect in the toilet goods department, as well as every other store department.

The Line Is Busy

Modeled after a telephone dial, a unique plastic counter display, brought out by Bourjois, is an attractive, convenient method of showing Evening in Paris lipsticks, letting the customer choose the shade she wants.

The selector display measures eleven inches in diameter and is six and a half inches high. It holds three dozen lipsticks under a circular plastic cover that spins easily to the shade selected. The six shades of the assortment are shown on the rim of the mirror in the center.

The display along with one-third of a dozen lipsticks are offered free with an assortment of six dozen Evening in Paris lipsticks.

New Twist

In articles published by the Farm Journal, there is an occasional glimpse of the pioneer west, which is still with us.

In a recent issue an Indiana lady writes in that she would like a chewing gum with a tobacco flavor.

Christmas Buying

There is a great deal of concern among cosmetic manufacturers over the way in which Christmas buying will be handled this year. This Christmas season means the difference between some profit or a big loss to a large majority of the perfume and cosmetic manufacturers.

The various cosmetic shows in different parts of the country are already pretty well booked up. In fact, some of them have already filled all of their available space. Now manufacturers are wondering whether these shows, which run generally through the summer, are not being held too early, and whether buyers will place only small, initial orders, or even wait until the Christmas season is further advanced before making commitments.

The old traditional way of pre-war Christmas buying was that a certain number of large stores sent their buyers to the market in August, and that on Labor Day night most salesmen started out on their territory, with the buyers who came into the New York market, arriving through September.

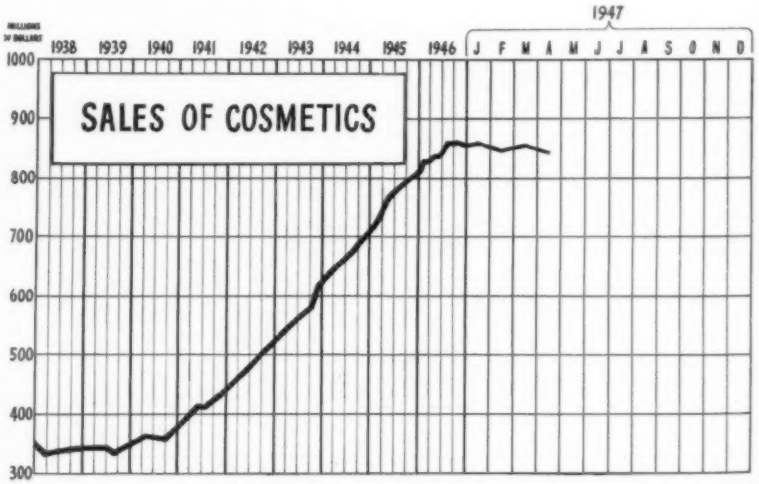
In talking with many buyers, there seems to be a feeling in the retail trade that Christmas buying will be spread through the Fall season, starting in September and running even through November. This is the factor that is disturbing manufacturers as much as the question of volume.

Last Christmas the very serious question of late deliveries, with many stores not getting the merchandise in the department before Christmas, was the fault of the manufacturer. Now it seems that this same situation may occur and be the fault of the retailer.

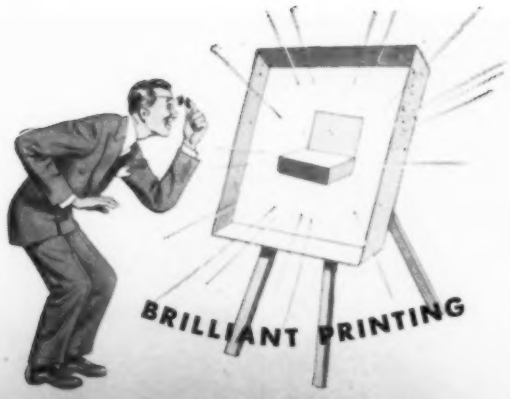
There is an unavoidable, physical problem on the part of the manufacturer in preparing goods for shipment, invoicing them and getting them on the way to the retailer, but there is also a similar physical problem, which cannot be avoided, in the store in getting goods from the receiving department into the department for sale. This is partly a problem of personnel in the store, and partly a problem of system. A store has only so many people to handle merchandise, and if a large tonnage is dumped into the store on a comparatively late date, that is early December, it is very probable that much of it will never reach the sales counter.

In normal times it takes one of the largest and most efficient stores from a week to 10 days to get merchandise marked and ready for sale from the receiving department, upstairs to the floor ready for sale.

One manufacturer says that it is normal for him to have his demonstrators wait several days after the store has received merchandise before they can put it up for sale. Manufacturers say that retailers' memories are very short. They forget that while it was basically the manufacturers' fault last year that so much goods were delivered late, the stores should remember that they were physically unable to handle the tonnage of late delivery. Many thousands of dollars of returned goods was merchandise that never got out of the store's receiving department.



Retail sales of cosmetics for the twelve months ended with April 1947 amounted to $845,771,000. This compares with a total of $853,999,000 for the twelve months ended with March 1947 and with $836,805,000 for the twelve months ended with April 1946.



UNUSUAL SHELF APPEAL

See what we mean

WHEN WE SAY CARTONS OF
COATED LITHWITE* ARE CLAY-COATED *Plus*

What gives *Coated Lithwite* these important plus qualities? First of all, its high-quality base stock is exactingly level. (Gardner-Richardson has 89 years of papermaking know-how!) And the clay coating is filmed on with mechanical uniformity—in one straight-through *precision* operation. Result? Just what you'd expect. A smooth, white, chalk-free board that brings up colors brighter, sharpens plate reproduction, folds and scores without flaking or shattering—takes a tight seal!

Decide, today, to investigate *Coated* Lithwite's possibilities for your product. Be ready—when our increasing production catches up with demand—to give your product a big plus with cartons of *Coated* Lithwite.

More eyes reach for your product in cartons of Coated Lithwite

The GARDNER-RICHARDSON Company

Manufacturers of Folding Cartons and Boxboard
Middletown, Ohio

Sales Representatives in BOSTON • CHICAGO • DETROIT • NEW YORK • PHILADELPHIA • PITTSBURGH • ST. LOUIS *Reg. U.S. Pat. Off.

KIMBLE'S
New
TUF-TOP
Neutraglas
AMPULS

the top is TOUGH!

KIMBLE GLASS

The Visible Guarantee of Invisible Quality

Vineland, New Jersey

DIVISION OF OWENS-ILLINOIS GLASS COMPANY

In spite of their eagerness for Christmas volume, few manufacturers will stick their necks out this year building up a heavy inventory in anticipation of late deliveries, which the store might not be able to handle or to sell. For this reason, if retailers persist on a supercautious or delayed buying policy, Christmas goods by manufacturers will be cut down accordingly, and stores will not be able to get late deliveries from many lines.

One-Ounce Cologne

We hear that one perfume house is rolling up a very substantial volume on a one-ounce cologne.

Whether the appeal for this size bottle is based upon economy, or for some convenience, such as the woman's desire to carry a small cologne bottle in her purse, is hard to say.

At any rate, trade response indicates that the small size cologne has a definite consumer appeal.

Week-End Sales Meeting

Carl Gardiner is one man in the industry who does not let a momentum, once he gets a hold on it, get away from him. He certainly has a momentum in Naylon.

The recent La Cross sales meeting was held on Saturday and Sunday. All of the La Cross salesmen were in from the road, and they spent these two days in a sales meeting with plenty of good humor and enthusiasm.

We did not hear the high point of the meeting, but this was certainly a speech by Carl Gardiner on Saturday evening, entitled, "Vacations—And How to do Without Them."

The meeting began promptly Saturday morning, ran through Saturday evening, and we should add, with undiminished enthusiasm.

Training Retail Salesmen

In a speech before the National Federation of Sales Executives, Burton Bigelow, head of a management consulting firm, made the statement that half the men in selling should not be there, and that inefficient hiring of salesmen levied a huge toll on business each year.

Mr. Bigelow's point was that there should be more intelligent methods of

The Cosmetic Trend

While department store cosmetic counters have on the average, fallen behind the all-over annual sales performance of the cosmetic industry during the last year, there are, however, considerable differences in the regional sales-reports which are worth studying by manufacturers, anxious to maintain the general upward swing of their sales curve.

Some regions have equalled, or even slightly improved upon, the national average sales-rise of the cosmetic industry of 5.7 per cent in 1946. Others, and often those where it might be least expected, show a severe drop. On the basis of the Federal Reserve Districts for which detailed figures are available New York and Chicago did best with a 6.0 per cent sales rise over 1945; 0.3 per cent better than the national industrial average and improving at the rate of 3.0 per cent upon the department store average, as reported by the Controllers' Congress. Cleveland is only one per cent behind the national industrial average with a 5 per cent sales rise over 1945. Richmond follows with a 2.0 per cent rise and San Francisco just broke even.

What makes these figures significant for the future planning of the cosmetic industry is that the two districts which show up worse in the annual sales comparison, San Francisco and Richmond, take top position when rated according to the size of the average gross sale. It was $1.95 in 1946 in San Francisco stores and $1.74 in the Richmond ones; the first including some of the best markets of the West Coast, the second taking in such important places as Washington D. C. and its surroundings. New York, often running on a curve of its own because of its large out-of-town clientele, reported average gross sales of $1.72. Cleveland had average gross sales of $1.68 and Chicago of $1.65. Note that the three Federal Reserve Districts having the highest average sales increase report the lowest average gross sale with an average of $1.68 (2 cents below the national average of $1.70.

Whether this means that price has played an increasing role in determining toilet goods sales volume during last year and whether further price adjustments may have to be made during the current year is a matter that will require further study. Cosmetic prices have risen but slightly during recent years. The greater value of the average cosmetic sales ticket during 1946, as compared with 1947, may be as much due to a general consumer trend to buying better cosmetics as to a tendency to make more purchases at each transaction. The average gross sale was $1.64 in 1945. The value of the sales ticket rose 6 cents during 1946. Stores added 3 per cent to their volume but had 2 per cent fewer transactions. The average sales woman handled 12,812 transactions in 1945 and only 12,137 in 1946. Comparing the average of the number of transactions per sales person with the same figures of the aformentioned Federal Reserve Districts, New York had 15,866 transactions, Cleveland 9,624, Richmond 10,708, Chicago 14,643 and San Francisco 12,336. The three Reserve Districts with the lowest average price averaged 13,257 sales per sales woman; those with the higher price average report average sales of 11,537 per saleswoman.

The reaction of the customer to the price ticket will need watching. The problem is not so much whether prices may require pruning as whether the bulk of the demand must be expected to shift to store-groups with a predominantly lower price average.

The tantalizing element in the situation is that there is as much in favor of a swing to lower prices as in support of higher levels. Buyers feel that the move is up to the industry and that intelligent advertising can turn the consumer demand in practically any direction.

CAN YOU

See into Glass?

Of course, you can see *through* a glass bottle. But you can't see *into* the glass; you can't see those qualities of sturdiness, uniformity and dependability which are so important for the protection of your product.

However, you can be assured of these qualities when SWINDELL makes your bottles. Long years of acquired skills and experience have equipped us to meet your requirements — whether in stock or private mould bottles, machine-made or hand-made.

At your service!

SWINDELL BROTHERS, Inc.

200 FIFTH AVE., NEW YORK ★ BALTIMORE 30, MARYLAND ★ ROBERTO ORTIZ • HAVANA, CUBA

Pinch the plastic bottle
and you're under a blizzard of bath powder.
Lord & Taylor
Alexandra de Markoff cools off the
hot weather scene with "Fragrant Fern"—
a mountain resort of mid-summer refreshers.
Street Floor

selecting salesmen. In our opinion, Mr. Bigelow might well have added that at least half of the trouble lies in the fact that very few manufacturers have a clear conception of what they want their salesmen to do.

Even if new methods of selection eliminated the duds and guaranteed to manufacturers a uniformity of natural sales ability in their organizations, there would still be large areas of waste of time and human energy, which would continue to take the same toll from business each year.

Although most sales managers would probably deny it, salesmen are still largely hired simply to sell a retail store. It is true in many organizations that they participate in some merchandising, that is they have some responsibility for working out window or interior displays, working out promotions, and even in some cases for a leeway in distributing cooperative advertising.

Very few companies have given their salesmen any training in retailing, so that they have an intelligent conception of their customers' problems and can present their own products in terms of successful retail selling. Even fewer companies have case histories and factual data on their product in a retail store under certain broad conditions, such as urban or rural communities.

Few salesmen are given the kind of ammunition and training by a manufacturer, so that they can sit down with the retailer and discuss with him in terms of his community, his type of clientele, and in his type of store what the expected turn-over of the line should be, what a basic selection of the line for his store should be, how many transactions per day, week or month he should expect, and other factors that are the instruments of an intelligent retailer in purchasing and in the conduct of his business.

It is time that salesmen are told to think in terms, not of selling a retailer, but of the appointing of a *sales representative*.

There ought not to be any glory for a salesman to sell a retailer merchandise, which he in turn either can't sell, or eventually sells at a loss, because of slow turn-over, or some other factor. It should be a great glory to a salesman when he takes a big order based upon intelligent planning with the store that will move these goods. This kind of selling naturally requires a man with sales ability, such as Mr. Bigelow discussed, but also requires a man who has been thoroughly trained by the company, firstly to think in terms of sales management rather than taking an order, then a man who has been thoroughly taught the fundamentals of retailing, and then a man who has been well trained to use as instruments for building sales in his territory every one of the tools of marketing, that is advertising, store promotion, store personnel cooperation, etc.

Elastic Plastic

To Alexandra de Markoff goes credit for some smart packaging and to Lord & Taylor for smart advertising in the promotion of the summer line, Fragrant Fern. Most unique feature of the line is the bath powder which is packaged in a plastic bottle. One merely squeezes the bottle and the powder is forced out through a hole in the cork. The packers of olives should bring out something like this.

Another remarkable thing about the bottle is that it won't break when dropped. Of course, one shouldn't go heaving it all over the place to try out its resilient qualities but the chances are that, if it should slip from your hand and fall to the tiles, you won't have to spend the next week scraping bath powder off the floor.

Highlight ON SALES APPEAL...

EYE-CATCHING designs . . . permanent colors that can't chip or scratch . . . beauty to enhance the appearance of your package . . . all these and more are yours when you seal with plastic closures.

Helping you select the proper design for your private mold closure or container is part of our service. Or, if you prefer, you may choose from a wide range of plastic caps of standard designs and sizes.

STANDARD *Cap & Molding* COMPANY, *Inc.*

Molders of Plastic Closures

307 S. EATON STREET, BALTIMORE 24, MD. • *Offices in Principal Cities*

The Bourjois holiday box decked with a bow and filled with Evening in Paris toiletries, contains powder, lipstick, rouge, perfume and talcum

Coty's Emeraude returns in a postwar setting. The gleaming flacon shaped like a huge square-cut emerald is "set" in a box of emerald green simulated leather etched with figures from an ancient Persian miniature.

Yardley's Bond Street gift set contains Bond Street perfume, toilet water, dusting powder, complexion powder, lipstick and a double compact. It is priced at $12.50.

Holiday Merchandise

While there might be some people in the industry worried about a dip in business, Bourjois shows signs of optimism in its prices, quality and styling of gift packages for the holiday season.

As usual Bourjois is among the first to have its Christmas line ready and in the opening salvos of the campaign have made it known that they expect to do an even greater volume of business than last year, and have geared the prices accordingly. Significant among the packages are the medium priced sets being pushed, since these are the ones that move the fastest.

The gift sets include a handsome silver box filled with Evening in Paris toiletries including face powder, lipstick, rouge, perfume and talcum retailing for $7.00 and a smaller package containing the popular Mas Oui perfume and cologne for $4.50.

Tabu Traveler

Dana seems to have come up with the answer to a problem that has long plagued women,—how to combat spillage from a powder box when it is opened, and prevent face powder from seeping out of its box while is it being carried around in a handbag or suitcase.

The "Tabu Traveler" has been especially designed for the prevention of such seepage, and at the same time reduces the danger of spillage of powder when the box is opened. This new package features an air-foam seal inside the cover of the box which is said to be sift-proof, seep-proof, absolutely powder tight. So when you take out your powder after carrying it in the jumbled contents of your handbag or traveling kit, the powder will still be in the box not all over the contents of the bag. This sounds OK to us, if only they do that with talcum and tooth powder containers. Too many times we've had to shake tooth powder out of a pajama pocket or the bottom of a shoe when the cap came off or it seeped out of its own accord.

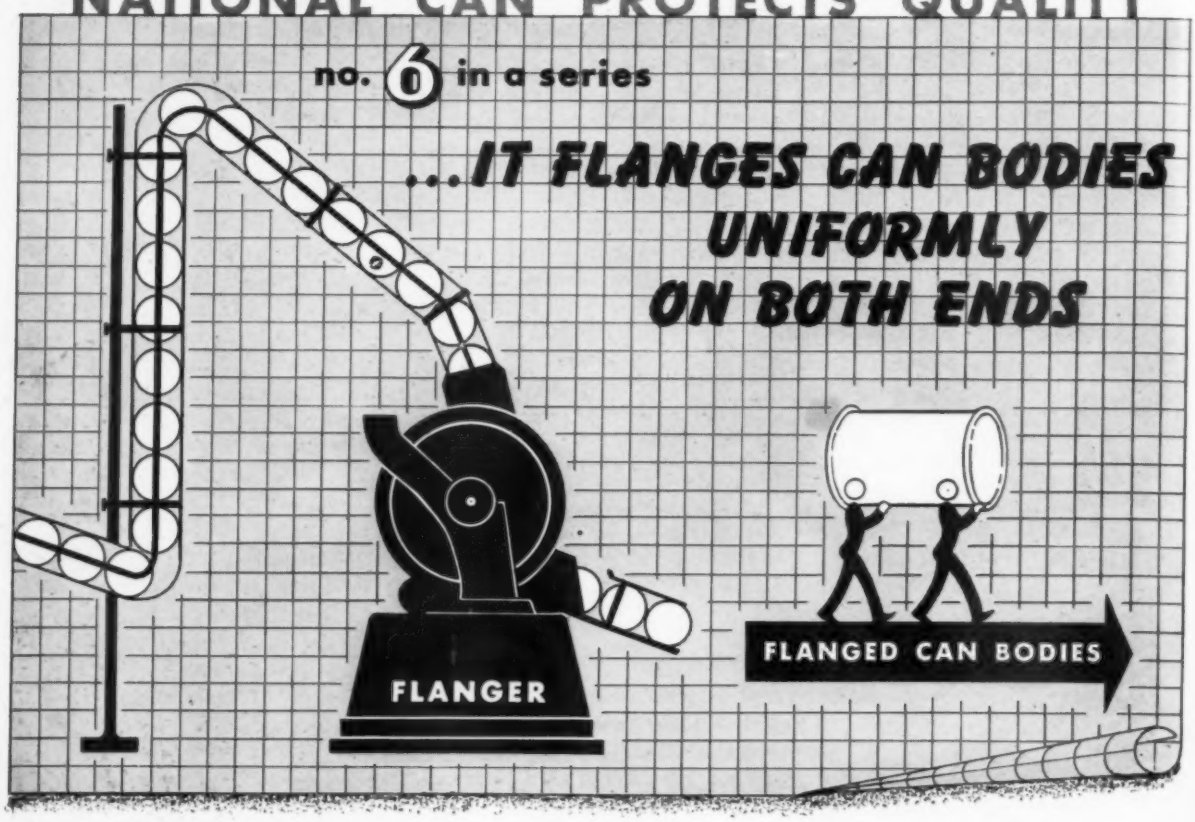
For immediate delivery, the Tabu Traveler comes in all the Tabu shades: Bermuda, Bolivia, Havana, Barcelona, Singapore, Rio, Nassau, and Argentine and of course the powder is scented with Tabu's "forbidden" fragrance. Retails at $1.00. The regular $1.75 size Tabu face powder will continue as usual.

Another Bourjois holiday offering contains the popular Mais Oui perfume and eau perfume.

Dana presents the Tabu Traveler, a new smaller-size box of Tabu face powder which features an air-foam seal inside the cover to make it powder-tight.

This Roger & Gallet Christmas gift set for men contains a shaving bowl and after shaving lotion, scented with eau de cologne naturelle.

NATIONAL CAN PROTECTS QUALITY



Once the side seaming of metal containers is completed, National Can Corporation's modern methods call for conveying the can bodies to a flexer flanging machine — by belt friction and by gravity in a runway.

The body of each National can is fed to the automatic rotary flangers at a rate in excess of 300 per minute. There it encounters a series of eight flanging pilots. Can bodies are made true and a perfect uniform flange or metal flare is produced at both ends of the can simultaneously.

The flanger starts and stops automatically by means of limit switches actuated by "electric eyes", thereby regulating the flow of cans to the unit, setting the stage for the all-important double seaming operation. The accurate degree of control obtained on National Can's production lines insures quality of output at a consistently high level.

NATIONAL CAN

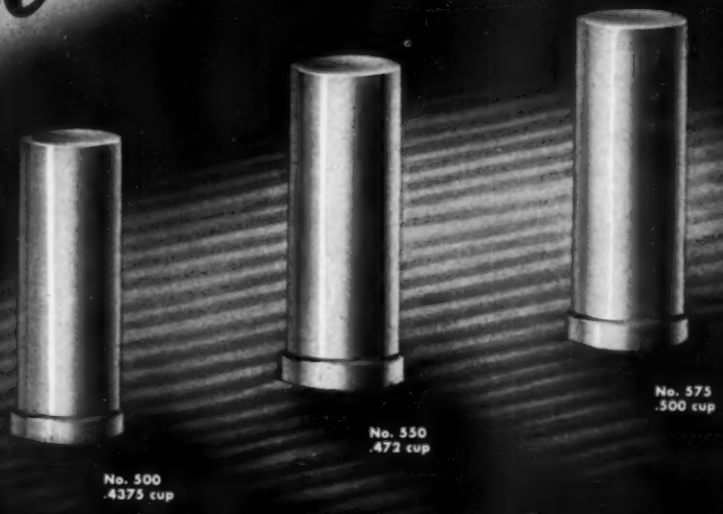
CORPORATION

Executive Offices: 110 EAST 42nd STREET, NEW YORK 17, N. Y.

SALES OFFICES AND PLANTS IN: BALTIMORE, MD. · CHICAGO, ILL. · HAMILTON, OHIO · BOSTON, MASS. · INDIANAPOLIS, IND. · MASPETH, N. Y. · McKEESPORT, PA. · ST. LOUIS, MO.

Rich Low BRASS

SWIVEL LIPSTICK CONTAINERS



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THE ULTIMATE IN QUALITY

- De Luxe polished Rich Low brass — baked lacquer finish
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- "Click-Tite" closure*

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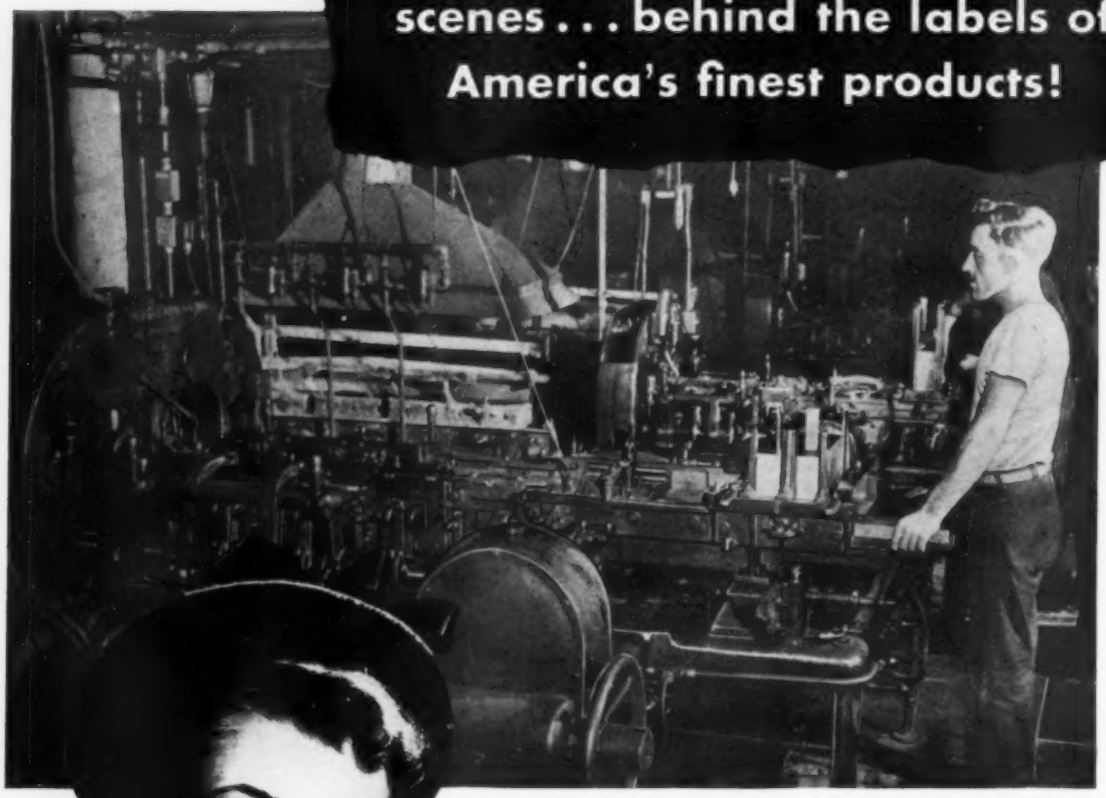
*Patents Pending

Continental serves behind the scenes . . . behind the labels of America's finest products!



MADE RIGHT! . . . *Two magic words that say, "Here is a quality product."*

That's why "made right" is Continental's proudest claim for its lithographed metal containers. Every step in this manufacture—from selection of raw materials through lithographing, body-forming and seaming—is painstaking and exact. Forty-two years of experience in the field—making more than 500 different shapes and types of containers for thousands of products—have developed our production equipment and manufacturing skill to top efficiency.

Add this to our exacting methods of inspection, testing and checking. Then you'll see what we mean when we say, "Continental cans are *made right!*" That's why thousands of metal container users look to Continental for the best in quality and the best in service.

CONTINENTAL CAN COMPANY

100 East 42nd Street, New York 17, N.Y.

Our Librarian threw light on A DISCOLORATION PROBLEM

RECENTLY, one of our customers asked us to help him track down the cause of discoloration in his food product. The darkening was not spoiling the food, but its unappetizing color had the effect of seriously reducing sales.

Our research chemists recognized the color reaction as one which frequently occurs in food products made from raw materials of naturally varying composition. To provide themselves with a complete background, they asked our Research Librarian to dig up all available material on the subject.

The Research Library made a search in their very complete collection and uncovered a number of pertinent articles, published in English, French, and German. For those published abroad, the Library furnished translations by their own staff. Aided by this wealth of information, our chemists were able to indicate the extent of such changes in food products. They then made recommendations which eliminated the discoloration.

If you have a glass or closure problem, bring it to Armstrong. It may not necessarily require the services of our Research Library, but, whatever the problem, you can be sure you'll get the best in technical advice. For Armstrong keeps scores of highly skilled specialists in research, design, engineering, packaging, traffic, and other services constantly on the job to assure you of top-notch glass and closure service.

For full information on any of Armstrong's glass or closures, call your Armstrong representative, or write direct to Armstrong Cork Company, Glass and Closure Division, 3807 Prince St., Lancaster, Pennsylvania.

first to develop a corrugated PREPAK*

*REG. U. S. PAT. OFF.

Hinde & Dauch cooperated with one of the country's leading department stores in developing the original PREPAK*, a method used to factory pack products in selling units for delivery direct to consumer without repacking by the retailer. This more efficient, more economical packaging method saves damage in transit, eliminates mark-downs. PREPAK*. . . an attractive package that invites more sales and "take-withs". . . enables the retailer to sell from display and ship from warehouse. Each H & D "first". . . the DUPLEX shipping-display box, the duo-use LUGGAGE BOX and many others . . . provides better protection, more advantages in shipping, greater economy in distribution. The Hinde & Dauch Paper Company, 4709 Decatur Street, Sandusky, Ohio.

LOOK TO H&D FOR PACKAGING "firsts"

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FACTORIES IN: Baltimore 13, Maryland • Buffalo 6, N. Y. • Chicago 32, Illinois • Cleveland 2, Ohio • Detroit 27, Michigan • Gloucester, N. J. • Hoboken, N. J. Kansas City 19, Kansas • Lenoir, N. C. • Montreal, Quebec • Richmond 12, Virginia • St. Louis 15, Missouri • Sandusky, Ohio • Toronto, Ontario • Boston, Mass.

The "Champ"

is a GLAMOUR GIRL

A COMBINATION THAT CLICKS WITH THE CUSTOMERS

..... EFFICIENCY PLUS BEAUTY

These same qualities are responsible for Meritseal's appeal. Many of the nation's leading cosmetic manufacturers have selected Meritseal as a closure for their products, because of its trouble-free application on the production line and the way it gives a positive, air-tight seal. They like Meritseal's beauty too . . . the trim, clean cut lines and gay colors . . . and they like Meritseal's price. Volume manufacture and advanced fabricating processes enable us to effect production economies that mean worthwhile savings to users of Meritseal.

Your request will bring samples and full information promptly.

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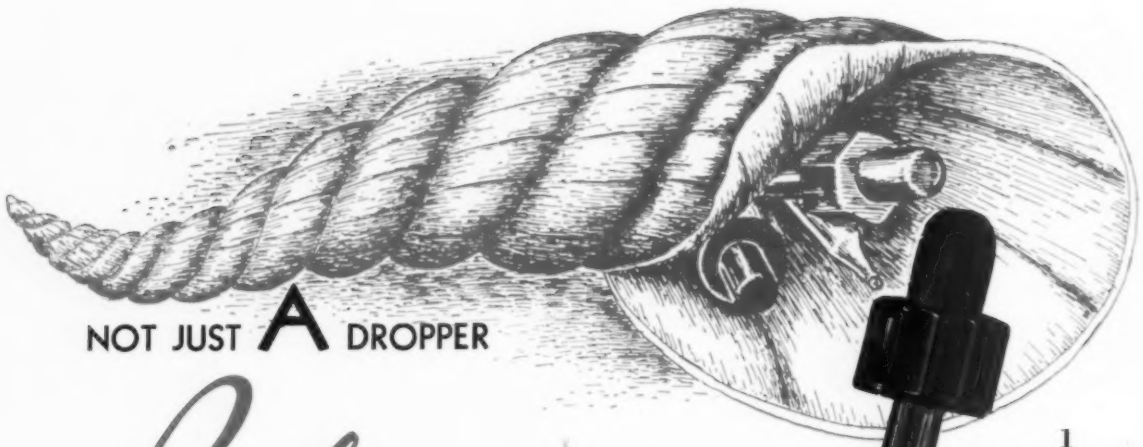
WESTERN REPRESENTATIVE: WESTERN CROWN CORK & SEAL CORPORATION . . . SAN FRANCISCO . . . LOS ANGELES



NOT JUST A DROPPER

The *Right* DROPPER FOR THE JOB

The diversification of New Perfection Dropping Parts anticipates the wide variety of uses for liquid preparations. Highest quality materials, faultless performance, and a choice of functional designs explain the popularity of NEW PERFECTION Dropping Parts in the packaging field. They complete a container which displays, protects and administers your product with a convenience and cleanliness that is really PERFECTION. New Perfection Dropping Parts will fit your own bottle or they can be supplied in combination with our new Modernistic bottles in amber, blue, green or clear glass. Bottle sizes—2 cc, ⅛, ¼, ½, 1 and 2 oz.

1 **FOR THE EYE**—Non-rolling extra depth bakelite cap; thick flange rubber bulb; Saftee ball glass.

2 **FOR HIGH POTENCY MEDICINES**—Metal cap; special thin flange rubber bulb; U.S.P. glass.

3 **FOR GENERAL PURPOSES**—Regular depth bakelite cap; natural rubber bulb; semi-blunt glass.

4 **FOR NOSE OR EAR**—Metal cap; Amekine synthetic rubber bulb; blunt glass.

A NEW PERFECTION Dropping Part Accurately CALIBRATED IN COLOR

This special type of dropper glass offers unusual convenience in the use of any preparation administered by specific dosage. Accurate calibration in any style or color indicates the dosage. Dropper glasses can also be permanently imprinted with the name of your firm or product.

Improved bottle shape. Designed to lie flat for convenient labeling. Front provides ample label space.

In Addition to Natural Rubber Bulbs for General Uses

AMEKINE, NON-SWELLING Synthetic Rubber Bulbs

Are available for use with oil preparations, such as nose and ear drops and vitamin products. Amekine does not swell like natural rubber and holds its original shape even after long exposure to oil.

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"GLASS GOODS OF THE BETTER KIND"

DODGE MILBOSSED-TOP CORKS

DODGE Milbossed-Top Corks give you extra selling power at the point of sale. These attractive closures add distinctiveness to your package while assuring complete sealing protection for your product.

Here is the closure that seals and reseals perfectly . . . pleases product users because they are easy to remove and replace. Dodge Milbossed-Top Corks are made of uniform, high grade natural cork and joined to durable, cleanly knurled hardwood tops. These are furnished in any color . . . embossed with a name or trade mark. Have yours embossed on a Dodge Milbossed-Top Cork—top choice for today's competitive market.

DODGE CORK COMPANY, INC., LANCASTER, PA.

Colorful folder shows you how Dodge makes the air-tight seal with sales appeal. You'll also see how well-equipped Dodge is to serve your closure needs. Your copy sent on request.

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Designed to Guard the Integrity of the Contents

PRECISION-MADE "fitments"

to your Specifications

SCIENTIFIC perfection is your assurance with every dropper no matter what your specifications are.

We have successfully helped many manufacturers design and execute complicated "fitments" for Serums, Vaccines, Toxins, Medicines, Chemicals and Vitamins and we can, without hesitation, work out your dropper problems.

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Famous Plastics

for Famous Merchandise

The rich, glowing tones of Plaskon Molded Color containers catch the eye and help make sales for Cloudsilk and Huntingford lipsticks, well-known cosmetics made by Chen Yu Associated Products, Inc., Chicago, Illinois.

There are hundreds of manufacturers in the drug and cosmetic field that have taken advantage of the outstanding physical and chemical properties of Plaskon Molded Materials. These materials offer production and selling features that develop profits in many ways.

Plaskon urea-formaldehyde and melamine-formaldehyde materials can be molded into any distinctive form desired, to achieve an outstanding personality for your products. An extremely wide range of permanent colors is available. Both Plaskon materials are completely impervious to the effects of alcohol, acetone or other common organic solvents. They are not affected by oils, fats or greases, and are tasteless and odorless.

Write for free illustrated book showing many uses of Plaskon* urea-formaldehyde and melamine-formaldehyde molding compounds in manufacturing and merchandising.

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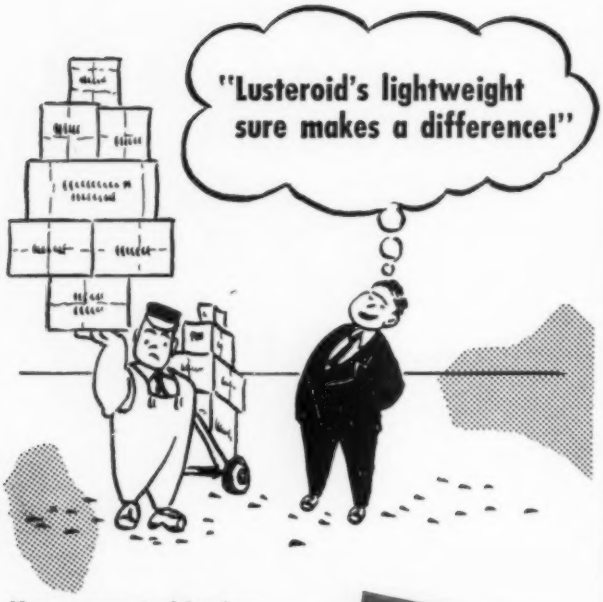

If you want shipping economy

No wonder Lusteroid users are so enthusiastic over these modern plastic containers. The savings in packing and shipping costs alone justify standardizing on these feather-light vials and tubes.

Because Lusteroid is so strong, rigid and unbreakable, no special packing or partitioning is required in handling and shipping. Lusteroid's amazing light weight effects substantial economies in transportation costs—in some cases as much as 66-2/3% over ordinary containers.

You'll like the protection with visibility, the wide range of colors and printability of Lusteroid, too. Sizes from ¼ to 1-¼ inches in diameter and lengths up to 6 inches. Cork, slip-on or screw-cap closures. Write for full details.

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Lustrously black jars, ceramically transformed out of standard flint jars by our Glass-Crafters shop! The jet black is permanently fired-in and is really swank! Available **from stock** in 1, 2, 4, 8, and 16 oz.

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YOU CAN'T SEE THE DIFFERENCE—BUT IT'S THERE

- "Deep-Rolled" Thread
- Starts fast, spins on
- Positive airtight seal
- 360° thread contact
- Even sealing pressure
- Full product protection

in the ANCHOR C.T. Cap with "Deep-Rolled" Thread

YOU can't see the difference with the naked eye. But the improved Anchor C. T. Cap is taller than ordinary C. T. caps. It is made that way to permit a longer thread and a more deeply rolled thread.

With the longer Anchor "Deep-Rolled" Thread, contact is assured between glass and cap threads *around the complete 360 degrees of the finish.*

The Anchor "Deep-Rolled" Thread contacts the underside of the glass thread near the wall of the container so that the grip is firm and even—reduces chances of cocking or stripping when cap is applied.

And the "Deep-Rolled" Thread is broadly rounded to allow plenty of clearance—reduces chances of binding—gives a "spin on" action for fast, economical sealing.

All this adds up to the fact that the Anchor C. T. Cap is a great C.T. cap for dependable airtight, leakproof sealing. And it means that manufacturers who use it get the utmost in economy of application and full product protection.

Tune in "Crime Photographer" every Thursday evening, entire Coast-to-Coast Network, CBS.

Anchor
CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

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Adaptable to any covering — fabrics, leather, paper, etc. — Warnercraft ® Tekwood ® packages have unlimited consumer re-use.

Send us your packaging problems — Warnercraft ® skill will produce the unusual — for perfume, silverware, cutlery, and industrial tool boxes.

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Standard

.. the name to remember in

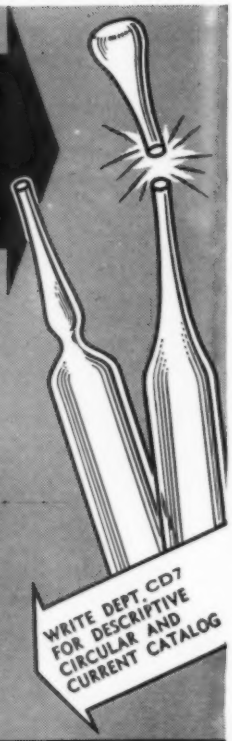
QUALITY TUBES

Standard

SPECIALTY & TUBE CO.

New Brighton, Pa.

All Coby Ampoules
are
"VACUUM FREE"
Before Snipping



Special process breaks vacuum in ampoule before snipping, to minimize the foreign particles and glass dust that may be sucked in when ampoule end is cut off.

Extensive line stocks all common sizes in both straight and constricted neck ampoules.

EXPERT GLASS BLOWERS SPECIALIZE IN COMPLETING ODD SIZES AND STYLES TO CUSTOMER'S SPECIFICATIONS.

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If you can . . . Barnett will provide them for you. Quickly, easily and economically! Barnett fancy paper boxes are "top flight" salesmen. No matter how good your product may be, it's the first impression that sells. Let us tell you how we can help *you* . . . just as we've helped some of the most famous names in American merchandising.

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For Four Generations, Manufacturers of Distinguished Paper Boxes for Distinguished Products

Top off YOUR BOTTLE OR JAR *with a* RICHFORD METAL CLOSURE

Any Size *Plain or Embossed* *Any Shape*

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Designed and Manufactured to your Specific Requirements

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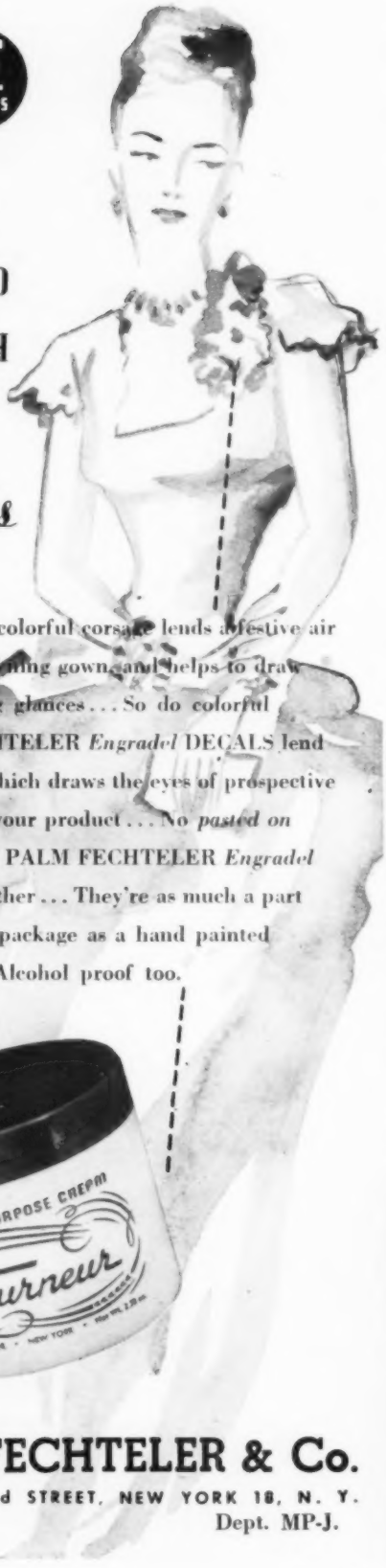
Represented in: St. Louis, Kansas City, Chicago, Los Angeles, Pittsburgh, Cincinnati, Minneapolis

P.F. DECALS

THE ADDED TOUCH *in Decals*



Just as a colorful corsage lends festive air to milady's evening gown and helps to draw admiring glances . . . So do colorful PALM FECHTELER *Engradel* DECALS lend the touch which draws the eyes of prospective customers to your product . . . No *pasted on look* with PALM FECHTELER *Engradel* DECALS either . . . They're as much a part of your package as a hand painted design . . . Alcohol proof too.

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BERNARDIN *Metal Closures*
*Since 1881—
America's First Manufacturer
of Metal Closures
BERNARDIN BOTTLE CAP CO., EVANSVILLE, INDIANA

HERE'S ONE WAY TO KEEP PRODUCTION COSTS DOWN

...Use

ANCHORGLASS
Standard Containers

- ★ Fast labeling
- ★ Lightweight—strong
- ★ Increase production
- ★ Reduce production costs
- ★ Reduce shipping costs
- ★ Simplify inventories
- ★ Easy, fast filling

IN these days of rising costs and high prices there's one way for manufacturers to keep production costs down—the use of Anchorglass standard containers.

Like the "Boston Round" in the picture, practically all Anchorglass standard containers offer very definite advantages over non-standard shapes.

For example, long production runs with minimum downtime for change-overs means smooth plant operation. Standard shapes handle faster on production lines. Inventory problems are simplified. Label application is speeded.

Anchorglass standard containers are lightweight; reduce shipping costs. There's no waste carton space which means smaller cartons and resulting economy. And, as expected, Anchorglass standard containers cost less than non-standard shapes.

That's why we say — keep costs down—use Anchorglass standard containers.

Tune in "Crime Photographer" every Thursday evening, entire Coast-to-Coast Network, CBS.

Anchor CONTAINERS and CAPS

PRODUCTS OF
ANCHOR HOCKING GLASS CORPORATION
LANCASTER, OHIO

VUEPAK

stars in a good "deal"

Showbox fabricated of Vuepak by Central States Paper & Box Co., Inc., St. Louis, Missouri.

All eyes are drawn to the sparkling beauty of this new container made of Monsanto Vuepak. And sales of the six Antoine cosmetic items it displays so dramatically are speeded by this extra attention.

If you plan to stimulate sales through special offers, introductory "deals" or companion selling events, it will pay you to consider *all* that Vuepak can do. In an individual "showcase" of this rigid, transparent packaging material, all the advantages of your "deal" . . . the number of items, their utility, color, design, etc. . . . are attractively revealed, enhanced and protected.

Vuepak's "deals" get special retailer cooperation, too. They display better; accelerate turnover and build volume; offer full protection against handling, missing items, shopwear and dust. Valuable selling time is saved because the facts of the "deal" are revealed at a glance.

Whatever you're selling . . . don't fail to show your customers all you've got to offer. . . with Vuepak. Get the facts from your box supplier or direct from MONSANTO CHEMICAL COMPANY, Plastics Division, Springfield 2, Massachusetts.

Vuepak: Reg. U. S. Pat. Off.

VUEPAK QUESTIONS AND ANSWERS

1 What is Vuepak?
Vuepak is a transparent, tough, rigid, beautiful Monsanto cellulose acetate.

2 In what form is Vuepak available?
In sheets up to 54" wide, and in continuous rolls up to 54" wide.

3 In what thicknesses is it ordinarily available?
In six standard gauges 0.005" to 0.020"

4 Does sunlight affect it?
No.

5 Is it affected by heat?
Not under ordinary temperatures. It begins to soften after 200° F. Underwriters' Laboratories classification "slow burning."

6 How can it be fabricated?
It can be drawn, shaped, formed or folded into almost any shape with inexpensive dies. It can be embossed, stapled, printed, cemented, or combined with other materials.

MONSANTO
CHEMICALS—PLASTICS

VUEPAK

SERVING INDUSTRY . . . WHICH SERVES MANKIND

*SANITAPE - SEALTITE

Basic Packaging

FOR A THOUSAND AND ONE UNIQUE AND OUTSTANDING PACKAGES

THIS patented method of packaging has never been equalled, since its creation by us. To date countless billions of pills, tablets and unit-powder doses have been wrapped by Sanitape-Sealtite in our Contract Packaging Plant — it has been the basis for many of the outstanding package creations. And this is quite natural, for unit-wrapping offers provably superior advantages — it is sound, practical, adaptable and appealing. Sealing each unit in its own air-tight compartment — protecting it from dirt, moisture, handling and breakage — providing a compelling, consumer appeal in convenience and appearance — Sanitape-Sealtite has deservedly won top place as a basic packaging for fine products.

Consider one of the units at the left — Sanitape or Sealtite or Powder Package — think of it as a mailing sample, a dispensing sample or part of a standard-sale package of practically any capacity. Picture it packaged with a single cover, double cover, catch-board folder or in a container of almost any size or shape — and realize that in every case, the product has been given most complete protection.

The packaging materials used in Sanitape-Sealtite are numerous, and in all cases, are determined by the chemical and physical properties of your product — it may be cellophane, foil, pliofilm, koroseal, thermoplastic coated papers or laminated combinations of several of these. There are few limitations and our thorough preliminary product analysis and merchandising survey, assure the use of the material which is *right for your product.*

ECONOMY OF UNIT PACKAGING IS A REAL CONSIDERATION for not only is there a distinct saving in shipping weight and the cost of packaging materials used; our Contract Packaging Service affords the manufacturer the economy of large-volume production and the efficiency of the most modern labor-saving devices. In our 100,000 square feet of light, air-conditioned space we (a) Receive your product in bulk (b) Store in bonded ware-rooms (c) Package by Sanitape-Sealtite (d) Insert literature if desired (e) Return finished packages to you, or drop-ship according to your instructions. We act as *your packaging department.*

Sanitape-Sealtite — the truly modern packaging — offers unusual and varied opportunities, both in sampling and standard-sale packages, for those who are interested in Better Packaging. If you outline your problem we shall be glad to give you complete and pertinent details.

BASIC TYPES OF UNIT PACKAGING

SANITAPE for large quantities in containers of limited size

SEALTITE for flat containers and more pretentious display

POWDER PACKAGE for powders, granules and crystals

METASEAL-PAK for unusual chemical product content and absolute moistureproof protection

MULTI-PAK for counter-sales packages of fixed quantities in a highly competitive market

C-PAK for a rugged, unit package with product visibility

EXTRUDO-PAK for creams, ointments, oils, liquids.

* Sanitape-Sealtite is a unique method for packaging pills, tablets, capsules, creams and powders, by which each unit is sealed in its own air-tight compartment, assuring convenience, protection and maintained efficacy.

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WHEN she speaks, no one "heils." But when she buys, business executives sit up and take notice. For she is Madam Consumer, and success or failure depends upon the dictates of her preference. Very often, the basis of her *continuing* brand-preference is the superior taste or scent-appeal of the product.

Little wonder many firms find that a simple improvement in the odor or flavor of a product works pure sales-magic. As one of the world's great suppliers of Essential Oils, Perfume Oils and Concentrated Flavors, MAGNUS, MABEE, & REYNARD, INC. has cooperated with many manufacturers in the establishment of completely individualized flavor or odor personality for products old and new.

The facilities of our laboratories and more than 50 years of specialized experience are available to you without obligation.

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NEWS...

Speaker at DCAT Luncheon

Earl I. McClintock addressed the spring luncheon meeting of the DCAT on June 25 at the Hotel Pennsylvania, New York.

One of the best informed men in the

E. I. McCLINTOCK

country on export matters pertaining to the pharmaceutical field, he has been associated with Sterling Drug since 1918, and at the present time is president of Winthrop Products Inc., a subsidiary of Sterling Drug, Inc., of which he is vice president and director.

He has just returned from an extensive trip abroad and presented at the meeting his observations on export trade.

Marschner Made V. P.

Appointment of Edward L. Marschner as divisional vice president of the Centaur Company division, Sterling Drug Inc., has been announced.

Born in Detroit in 1911, Mr. Marschner graduated from the University of Michigan in 1932. An assistant professor of chemistry at the Detroit Institute of Technology for a year, he became assistant chief chemist of the Chas. H. Phillips Chemical Co., division of the Sterling Drug Inc. in 1934. Three years later he was appointed production manager of the Centaur Company Division and upon his return from War service in 1945 became plants supervisor.

During the war, Mr. Marschner was a Lieutenant, U. S. Army Chemical Warfare Service, assigned to incendiary development work. Later he was appointed chief of the pharmaceuticals and medicinal chemicals unit, War Production Board.

Ronsard Perfumers Sold

C. V. Cheesman, formerly of Coty, and J. S. Kelly, formerly of De Raymond, in association with Jules Guckenheimer are the new owners of Ronsard Perfumers, 1947 Broadway, New York.

Dr. Rider Upped by Lever Bros.

Dr. Theodore H. Rider has been named associate director of research by Lever Brothers Company. Dr. Rider has been technical director of the Pepsodent division of Lever Brothers Company in Chicago for the past ten years, and in his new post at Cambridge, will assist John W. Bodman, director of research, in handling of all technical research activities.

In 1930 Dr. Rider was named chief chemist of the William S. Merrell Company, and became the company's research director in 1933. In addition he

DR. T. RIDER

served as professor of organic chemistry at the Cincinnati College of Pharmacy for the five-year period beginning in 1932. He joined the Pepsodent Company in 1937.

Lentheric Names Grelet Vice President

Jean E. Grelet has joined Lentheric, Inc., as vice president and director and will have charge of the company's retail operations.

Mr. Grelet, who in accord with Cartier, Inc., jewelers, resigned from that company to join Lentheric, has left for Europe to supervise the reorganization of the Paris salon, and plan the forthcoming opening of the London salon.

Born in France, Mr. Grelet studied art in Paris and joined Cartier in 1927 as a designer. He later became advertising manager and sales manager.

JEAN E. GRELET

Upon his return to New York, Mr. Grelet will devote his activities to the organization and management of the new Lentheric salon now being erected of the corner of Fifth Ave. and 53 St. The opening is scheduled for October.

Underwood V. P. in Charge of Sales

John A. Underwood has been appointed vice preident in charge of sales and promotional activities for Lehn & Fink, Inc. Mr. Underwood was formerly with Personal Products Corp.

Bjorksten Adds to Staff

The Bjorksten Laboratories have announced the appointment of several newcomers to its staff. Arthur E. Marsan previously on the research staff of the Solar Mfg. Corporation, Eleanor G. Sheridan, a chemist formerly with the Container Corporation of America, Helen Robison, a chemist formerly at the Wilmington Refinery of the Shell Oil Company at Los. Angeles, and John Carlton Elliott, who served in the Marines during the war, who comes to the organization from the Medi-Synth Laboratories, Los Angeles.

Sharp & Dohne Information Program

As part of its continuing program to keep employees informed about company operations, functions and policies, Sharp & Dohme, Inc., has instituted a series of informal meetings for employees with company president John S. Zinsser.

Meeting during regular working hours with approximately 100 employees at a time, Mr. Zinsser describes what the basic figures in a financial report mean. By use of specially prepared charts he likens the operations of the company to the financial problems of an individual employee.

Included in the charts is one showing the outstanding progress Sharp & Dohme has made in the last ten years. "In that time, the company has tripled its business," Mr. Zinsser reveals, "and only a lack of sufficient production facilities is holding back our further growth."

Following his discussion and explanation of the charts, Mr. Zinsser answers any questions employees may wish to ask.

Heyden Twiss's New Quarters

Over 35 members of the chemical industry were present at a reception given by the House of Heyden Twiss, June 13, celebrating the advertising agency's recent move to new and larger quarters in the Bartholomew Building.

Joins Bristol Research Staff

Dr. Oliver B. Fardig has become a member of the chemical research department of Bristol Laboratories Inc., it has been announced by Dr. Amel

DR. OLIVER FARDIG

Menotti, director of research.

A graduate of Carleton College, Dr. Fardig received his Master's degree from Pennsylvania State College and his Ph. D. from the same institution.

Gov. Dewey Names Sibley

Governor Thomas E. Dewey has appointed George H. Sibley, vice president of E. R. Squibb & Sons to the board of trustees of the State Institute of Applied Arts and Sciences in New York City.

Mr. Sibley, who will serve until August 31, 1951, was named to fill the vacancy caused by the death of R. Emerson Swart.

William D. Luhrs

William D. Luhrs, who was manager of the Boston branch of Innis, Speiden & Co., and retired in October 1944, died at Brighton, Mass., May 22.

Pauline Foster Named Manager

Pauline Foster has been appointed sales manager of Ann Haviland, 1 W. 52 St., New York.

PAULINE FOSTER

Well known in the cosmetic industry, Miss Foster was department store sales manager of Peggy Sage.

Armstrong Cork Enlarges Sales Staff

Five members of the sales training class of the Armstrong Cork Company have completed their training and been assigned to district offices of the glass and closure division.

Kilbourn Gordon Jr., and J. H. Cowan, Jr. have been assigned to the New York office, P.W. Troplett to the detroit office, I. B. Callman to Philadelphia, and R. C. Wagner to Cincinnati.

At the same time, the company announced the resignation of A. J. Cashman of the glass and closure's Pittsburgh office. Mr. Cashman leaves after 39 years of service. He will be succeeded by Vernon E. Force, who is being temporarily transferred from the Dallas office.

Hooker Electrochemical Advances Two

The Hooker Electrochemical Company, has appointed Horace W. Hooker Jr., as purchasing agent for the company

H. W. HOOKER Jr.

and James S. Walker technical service representative.

Mr. Hooker is a graduate of Cornell University and has been associated with the company since 1934. For the past six years he has been assistant purchasing agent. Prior to that he had been engaged successively in research and development department, and had been assistant to the sales manager in charge of sales promotion and advertising.

Mr. Walker, a graduate chemist of Union College, joined the Hooker staff in 1940 and has experience both in research and in plant operation. With the Niagara Falls office of the Hooker Company as his headquarters, he will handle problems related to the shipping, storing and handling of all Hooker chemicals. The chief emphasis of his work will be placed on the elements of safety in the handling of Hooker products in the consumers' plants.

New Verley Quarters

Albert Verley & Co., has moved to new quarters in Chicago, located at 440-450 West Superior St., Chicago 10, Ill.

Friedman, Lakritz Nuptials

Mr. and Mrs. William Lakritz have announced the marriage of their daughter Lorraine to Jack Norman Friedman on June 28, in Chicago.

Mr. Friedman is majoring in chemistry at the University of Illinois and is working at the Chicago office of Florasynth Laboratories, Inc. He served three years in the Marine Corps with the 2nd and 6th Marine Divisions and saw combat in the Pacific as a tank gunner.

RUTIN

by Baker

READY ON LARGE-SCALE PRODUCTION

....Highly Publicized Drug Finding Wide Use in Treatment of Capillary Fragility Associated with Hypertension

FOR SEVERAL MONTHS Baker, with its enlarged research and development program, has been producing Rutin on a pilot plant basis. With the new crop of buckwheat now available, we are pleased to announce that commercial production is under way on a large-scale basis.

Send for Helpful RUTIN BULLETIN

Rutin has been found to be therapeutically valuable in the treatment of capillary fragility associated with hypertension. It has been estimated that there are in this country, about 5 million or 6 million people who have hypertension. Of this group at least a million or more would have capillary fragility. Be sure to write for Rutin bulletin and bibliography. Get all the facts.

PHARMACEUTICAL MANUFACTURERS

What Are Your Requirements?

If you plan to market any dosage form of Rutin—Baker asks for the opportunity of quoting prices and placing our literature in your hands. Please outline your monthly requirements in confidence and address your letter to: *Fine Chemical Division,* J. T. Baker Chemical Co., Phillipsburg, New Jersey.

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Baker's Chemicals

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Vibrant as sunshine and pulsating as the infusion of flowering blossoms with the Spring breeze—such is the effect of EXALTOLIDE on your perfume. EXALTOLIDE is the most highly developed, purest and strongest fixative body of a Musk-Ambergris character yet produced.

Perfume extracts, powders of any type, and creams daily are being improved and rounded by its aid, *without change of odor character.* A test will startle you! The value of EXALTOLIDE is priceless . . . its use economical.

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George A. White Advanced

George A. White, sales representative for Innis, Speiden & Co., in Cincinnati, has been made manager in that city.

Mr. White joined Innis, Speiden in 1941 doing inside sales promotion work

GEORGE A. WHITE

in the New York office. In 1943 he sold Innis, Speiden products in Western New York and part of metropolitian New York. He was transferred to Cincinnati last year.

Miller Named to Board

Clarence E. Miller, president and general manager of A. Schilling & Company, a division of McCormick & Company, Inc., has been elected to the senior board of directors of the latter company. Mr. Miller has been associated with A. Schilling & Company for more than seventeen years. Prior to that he was general manager of Branch house and sales.

Lillie Appointed Acting Controller

Walter T. Lillie has been appointed acting controller of Rexall Drug, Inc., he will be in charge of all accounting activities for Rexall.

Before he joined Rexall, Mr. Lillie was with the Walgreen Drug Company for over 18 years. During that time he served first as a staff assistant to the vice president and treasurer, then as manager, personnel and most recently, as director of statistics and analysis, accounting division.

While at Walgreen, Mr. Lillie developed a department for production analysis which interpreted accounting data for use by operational departments such as sales and merchandising.

A native of Salt Lake City, he was graduated from the School of Business Administration, University of Chicago.

Turner & Co. Represent Distilleries

Arrangements have been completed this month for Joseph Turner & Co., Ridgefield, N. J., to market denatured alcohol manufactured by Clarke Distilleries, Ltd., Boston.

Clarke Distilleries, operates a plant for manufacturing alcohol at Caribou, Maine. Carload and tank car shipments will be made from the distillery site.

Turner & Co., as sole selling agents, will market Clarke's alcohol through their Ridgefield, Chicago and New England offices. Stocks for less than carload and tankwagon deliveries will be maintained at these points.

Planning future operations of Centaur Company Division, Sterling Drug Inc., are seated E. L. Marschner, divisional vice president and Stanley I. Clark, vice president of Sterling Drug; (standing) R. E. Gray, sales manager; J. E. Wickes, vice president, General Drug Company, and Arthur Meares, advertising manager.

E. A. Joering Retires

After more than thirty years' service E. A. Joering, vice president in charge of purchasing and production of the Wm. S. Merrell Company, has retired because of ill health.

E. A. JOERING

Starting with the Merrell Company in 1916 as an assistant to Thurston Merrell, now president, Mr. Joering worked his way up until in 1924, he was appointed purchasing agent. He was named assistant treasurer in 1926 and secretary of the company in 1937. In 1943 he was elected vice president in charge of purchasing and in this position directed the recent extensive expansion in the Company's plant facilities.

At the start of World War I his career was interrupted when he enlisted in the Sanitation Division of the Medical corps. He later held the rank of Captain in the reserve.

Mr. Joering's production duties will be carried on by F. J. Messmann, plant manager, and his purchasing duties by Andrew Lincoln, purchasing agent.

Schriever Named Pharmaceutical Director

John H. Schriever has become associated with Commerical Solvents Corporation as pharmaceutical director. He will assist Henry E. Perry, executive vice president, in the pharmaceutical field.

In his new post, Mr. Schriever will coordinate the pharmaceutical activities of the research production, and the sales departments of the company.

Mr. Schriever has long been prominent in the biological field as well as the pharmaceutical field. He was with Parke, Davis & Co. for 20 years. Prior to joining Commerical Solvents, he was sales manager for Hoffmann-La Roche, Inc.

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WE ALSO MANUFACTURE POWDER PUFFS, VANITY PUFFS, LOOSE SIFTER POWDER DEVICES AND SPECIAL LAMSDOWNE PUFFS

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SINCE 1877

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WEST TORONTO, ONTARIO

Dr. Harris Named To New Post

Dr. Carl A. Harris has been named assistant director of the medical division of Bristol-Myers and subsidiary companies, according to an announcement by Dr. Delmas K. Kitchen, director of

DR. CARL A. HARRIS

the medical division.

Dr. Harris is a native of New Albany, Indiana. He took his B. S. from the University of Virginia in 1922, his Masters in 1924 and his Doctorate in physical chemistry the following year.

After extensive experience as physical chemist for Johns-Manville and Standard Oil of New Jersey, he decided to enter the field of medicine and accordingly received his M.D. from Temple University Medical School, in 1944. In 1945 he joined the Navy with the rank of Lieutenant J.G. in the Medical Corps. At the conclusion of his naval service he joined Bristol-Myers.

Chaleyer Leaves For Europe

Ph. Chaleyer left for a three month trip to Europe where he will visit both in France and Switzerland. He plans to return to this country in September.

ADMA Golf Tournament

At the American Drug Manufacturers Association golf tournament the winner of the President's Cup with the Tournament low net was Dr. E. Volwiler; Low gross, Chas. A Dunning; Qualifying low gross, John G. Searle. Other winners were: Miller Fargo, F. O'Brien, F. Thayer, W. Gilman, E. Tetter, H. Loynd, R. Rice, W. L. Dempsey, J. Fistere, L. Roehm, Dr. J. C. Schneider, Lincoln McNeil, Dr. John Norton, Leslie Harrop, Frank Jones, Ray Horn, J. B. Fullerton, W. Keutzer, Joseph Noh, Val Kolb, Ray Anderson, Mrs. C. B. Baber, Mrs. S. Smith, Mrs. S. B. Bradshaw, Chas. Predmore, J. C. Chilcot, C. B. Baber, Sam Wheeler. Among the guests were: W. W. Huisking, Lee Klemmer, Wm. Chapman.

Beauty Counselors Take Over deNavarre Associates

Beauty Counselors, Inc., have acquired the physical assets, laboratory and the entire staff of Masion G. deNavarre Associates, drug and cosmetic consultants. This new acquisition will be welded into its wholly owned manufacturing subsidiary, Cosmetic Laboratories, Inc., of Detroit.

Masion G. deNavarre, joins Beauty Counselors as vice president and a director, and also as vice president in charge of manufacturing and research of Cosmetic Laboratories, Inc.

Studio Cosmetic Co. Formed

The Studio Cosmetic Company formerly at 641 North Highland Ave., Hollywood, Calif., has moved to its new factory located at 12232 West Olympic Blvd.

Rush Job by Powell & Co.

Twin-engined DC-3's of the U. S. Airlines took off from Bendix Field June 4 with 50,000 pounds of insecticide supplied by John Powell & Co., Inc., in response to an emergency request from the government of El Salvador to stem a locust plague that threatens to wipe out the country's coffee crop.

Working night and day on the emergceny order, the plant of John Powell & Co., Inc., kept a steady stream of trucks shuttling between Brooklyn and Bendix Airfield, near George Washington Bridge, until the last DC-3 had taken off with its three-ton load of grasshopper death juice.

Officials of the Central American country, frantic to find a means to prevent complete annihilation of their country's main crop, consulted Powell entomologists with their problem. Quick tests together with pertinent information from the Powell files revealed the new organic chemical, Benzene Hexachloride, would do the job in short order.

With the locust plague so critical, it was impossible to wait for ordinary means of transportation, so aircraft were chartered to leave as soon as the insecticide could be processed. The air shipment—first of its kind ever made—went non-stop to Miami, Fla., and from there by TACA Aircraft to El Salvador.

Stanway Leaves Squibb

H. Geddes Stanway has resigned his position as director of salary and wage systems for E. R. Squibb & Sons to take up private practice as a management consultant.

H. G. STANWAY

For the past four years Mr. Stanway has administered various job evaluation plans successfully completed by him and approved orginally by the War Labor Board and Salary Stabilization Unit in the early months of government control.

Mr. Stanway, age 37, is a member of National Panel of Arbitrators, A.A.A. and was formerly a consultant on the staff of Stevenson, Jordan and Harrison, Inc. He is the author of "Applied Job Evaluation."

Aldo Chem. Corp. Formed

Aldo Chemical Corporation, 33 Union Square, New York 3, has been formed to manufacture fine chemicals for industrial and research use.

Hendy Here For Visit

Evans Chemicals Limited's chairman of the board, Thomas G. G. Hendy, is in the U. S. for technical discussion with Evans Chemetics, Inc., New York.

While the English company is planning considerable expansion in its chemical manufacturing, Mr. Hendy is also meeting with American cosmetic manufacturers who wish to have their products manufactured in England for distribution in Europe. Mr. Hendy exexpects to return to England early in the fall.

Synthetic Organic Chem. MFG Assn.

Synthetic Organic Chemical Manufacturers Association of the U. S. have moved to 41 E. 42 St., Room 1205, New York 17. The telephone number remains the same MU 2-8128-9.

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S. C.

Kimble Glass Appointments

E. B. Dennis, Jr., Edwin J. Rhein and Edward W. Charlesworth have been appointed division sales managers for Kimble Glass Division, Owens-Illinois

E. B. DENNIS Jr.

Glass Company. Mr. Dennis was named as sales manager of the container and accessories division, Mr. Rhein as sales manager of the scientific division and Mr. Charlesworth as sales manager of the tube and rod division.

Mr. Dennis, who served as sales manager of the container division of the Kimble Glass Company before that firm became a division of Owen-Illinois, is a graduate of Cornell University. He joined Kimble Glass in 1933. After serving as New York Branch manager he became container division sales manager in 1941.

Mr. Rhein, a graduate of the St. Louis College of Pharmacy, has served as sales manager of the scientific glassware division of Kimble since 1938 and will continue in that same field. He joined the company in 1929 as Chicago branch

E. J. RHEIN

manager after having served for ten years as a sales manager for the Vacuum Oil Company. In 1930 he was transferred to Vineland as assistant general sales manager and in 1939 was appointed sales manager for the scientific division.

Mr. Charlesworth, whose father was plant manager for the T. C. Wheaton Glass Company, has been associated with the glass industry virtually all of his life. He became associated with the Kimble Glass Company in Chicago in 1911, remaining there until 1915. He was elected vice president of Kimble and was in that capacity when the company was acquired by the Owens-Illinois Company in 1947. He will renew the market research and development program of the tube and rod division which was brought to a standstill by the war.

Hormocreme Company Formed

A new cosmetic company, Hormocreme, Inc. has been formed to take over the manufacture and marketing of Hormocreme, for outlet through franchised beauty salons only.

The company's proudction is headed by Ralph Galowin, who has been in the drug and pharmaceutical fields for 25 years. He was associated with Dr. William Malisoff, leading U. S. authority on hormone extraction. Mr. Galowin, in addition to his production duties, will function as secretary and treasurer of the company.

President of the company is William Morrison, formerly general sales manager of Don Juan. Mr. Morrison for the time being will devote the major portion of his efforts to the direction of sales both domestic and foreign. Mr. Morrison pointed out the Hormocreme Massage would be restricted to franchised operators for two reasons: First, so many questionable statements have been made regarding the efficiency of hormone beauty treatments that Hormocreme, Inc. believes it advisable to restrict the product to outlets that are responsible to a steady and regular clientele; secondly the desirability of professional application to supplement home application for maximum results, makes the beauty salon the logical outlet.

The company is located at 425 E. 50 St., New York.

Ralph Morris Heads New Powell Office

Ralph Morris, formerly sales representative on the Eastern Seaboard for John Powell & Co., has been placed in charged of a new company branch office in St. Louis. He will represent the Bowell company in the states south of St. Louis.

Mason Joins Bristol Labs.

Arnold E. Mason has joined the pharmacology control department of Bristol Laboratories Inc., Syracuse.

A native of Nebraska, he was acting

ARNOLD E. MASON

head of the pharmacology department at Creighton University College of Pharmacy in Omaha for a year, and then joined the Food and Drug Administration in 1944. He joins Bristol Laboratories directly from this connection.

Jacobson Acquires Flamingo Co.

The entire holdings of Flamingo, Sealcote, and Zuni nail preparations have been purchased by Joe Jacobson of Los Angeles.

Formerly owned by Louis Herzberg, the new organization will continue to manufacture products under the name of the Flamingo Manufacturing Company, operating from the main plant at 1227 North Highland Ave., Los Angeles.

Mr. Jacobson, president of the new

JOE JACOBSON

company was formerly with Walgreen. He joined Thrifty Drug Stores and left that organization to take up duties as West Coast regional director of the Toni Company.

ADVERTISEMENT—*This entire page is a paid advertisement* *Prepared Monthly by U. S. Industrial Chemicals, Inc.*

U.S.I. CHEMICAL NEWS

July ★ A Monthly Series for Chemists and Executives of the Solvents and Chemical Consuming Industries ★ 1947

New Process Boosts Heavy Carbon Output

A 600 per cent increase in the amount of heavy carbon available for scientific studies of the secrets of life and growth has been made possible by development of a large-scale process for separating heavy carbon atoms from ordinary carbon, it was revealed recently. Because carbon is a constituent of all living cells, the heavy form has been widely used to trace chemical reactions in living tissue.

U.S.I. Ups Methionine Output— Wide Pharmaceutical Use Seen

Recent Papers Indicate Vital Amino Acid Will Have Use In Enrichment of Feedstuffs as Well as Medical Therapy

*Increased demand for methionine has accelerated production schedules for this vital amino acid, a U.S.I. official announced recently. Methionine, a scientific rarity as recently as a year ago, is now being widely used in the treatment of liver damage and the fortification of oral and intravenous protein hydrolysates. New work indicates it may be employed in the therapy of arteriosclerosis, anemia, and benzene poisoning. Increasing use is also foreseen for this compound as a means of enriching feedstuffs.

Methionine For Feedstuffs

The sulfur amino acids, of which methionine is one, appear to be important in animal nutrition. For example, attempts to use synthetic urea in rations for lambs was unsuccessful until methionine was added to the diet. The addition of this compound influenced bacterial synthesis in the stomachs of the lambs, resulting in a decided increase in the weight of the experimental animals. Work of this kind seems to indicate that amino acids of the methionine type play an important role in stimulating the bacterial flora of the stomach of the farm animals. This stimulation appears to produce a growth vitamin which is not made available by any other means.

It has been established that considerable increase in the growth of poultry can be obtained when marine protein is used to supplement soybean protein. Some evidence indicates that part of this growth increase may be due to the presence of methionine in fish products. This is corroborated by the fact that when methionine is used as an adjunct to soybean meal, it has been found to increase the poultry growth.

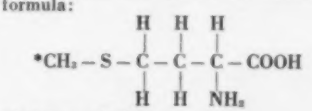
Little is known about the amino acid requirements for egg production, but the information available shows that there is a greater percentage of sulfur amino acids in egg than in poultry meat. It can, therefore, be concluded that amino acids, such as methionine, are intimately related to egg production.

(*Continued on next page*)

What Is Methionine?

Methionine is one of the ten amino acids essential for the growth and repair of animal tissue. It cannot be synthesized in the animal or human body, but must be incorporated in the diet. Its best natural sources are milk and dairy products such as cheese. One quart of milk contains about one gram of methionine.

Chemically, methionine is alpha-amino-gamma-methyl mercapto butyric acid. It has the following structural formula:



*Labile methyl group

U.S.I. MAKES NEW 'TIME MAP' AVAILABLE FOR LONG DISTANCE PHONE USERS AND TRAVELERS

LEGEND

- States using daylight saving time
- Cities using daylight saving time
- U.S.I. Sales offices, plants and warehouses
- States in which principal cities use daylight saving time, with the following exceptions—

IN PENNSYLVANIA — Dunmore, Monessen, Nanticoke, New Castle, Shenandoah.

IN ILLINOIS — Alton, Berwyn, Granite City, Jacksonville, Mattoon, Moline, Rock Island.

IN INDIANA — Bedford, Evansville, Kokomo, New Albany, Terre Haute, Vincennes.

Note: When daylight saving time is applicable add one hour.

A guide to time-zone and daylight-saving time differences in the United States has been prepared for your convenience by the makers of U.S.I. solvents, chemicals, and resins. Easily-read 9" by 12" copies, suitable for ready reference, may be obtained upon request.

The information contained in this map has been carefully checked with reliable sources. Naturally, however, U.S.I. cannot assume responsibility for its accuracy.

Diphtheria Serum Improved By Alcohol Precipitation

A diphtheria toxoid, claimed to be free of substances causing fever and other reactions, was exhibited recently at a meeting of an American scientific group. Called the outstanding achievement of the year in preventive immunology, the toxoid is said to contain double the immunizing potency of former toxoids. Secret behind the success of this new serum is the process of alcohol precipitation, the discoverers state. This process takes place at a temperature so low that pyrogen-producing bacteria cannot develop.

New Moth Proofers

Guanidine and substituted guanidine salts of dibasic carboxylic acids, except oxalic, are useful as mothproofers when applied at about 3 per cent by weight to cloth, a recent patent states. These compounds are only slightly soluble in petroleum hydrocarbons, soluble to a limited extent in aromatic hydrocarbons, but quite soluble in alcohol.

New Agriculture Yearbook

The new "Yearbook of Agriculture" (1943-1947) which answers thousands of questions about recent applications of chemistry to farming, is now ready for distribution. The yearbook is the first published since 1942, and the latest in a line of annual volumes on farming that date from 1862.

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July ★ **U.S.I. CHEMICAL NEWS** ★ 1947

NEW DEVELOPMENTS IN METHIONINE

(Continued from page one)

Methionine may also be the means of saving the millions of dollars lost annually by the meat packing industry because of faulty or damaged livers found after slaughter of farm animals.

According to one authority, the low-cost methionine made available by U.S.I. may result in "super-charged" feed concentrates. These concentrates are likely to be based on soybean meal which requires additional methionine for maximum growth response.

Arteriosclerosis Aid

Indications that methionine may reduce the cholesterol in blood and blood vessels has been reported. This work obviously has an important bearing upon the treatment of hardening of the arteries, in which excessive cholesterol deposition is believed to play a part. In the experiments conducted at a western medical school, significantly low levels of blood cholesterol and cholesterol esters were established, and the aorta, heart, and liver showed low lipid levels after Leghorn hens had been treated with methionine for seven weeks.

In Anemia Therapy

Following successful experimental studies on animals, which were reported in a previous issue of Chemical News, a Parisian scientist undertook a clinical trial of methionine for the treatment of anemia. Ten patients with anemias of various types were given doses of methionine daily. The amino acid proved effective in 7 of the 10 cases. Slow and continuous increase in the number of red blood corpuscles, with an average increase of 1,100,000 in two weeks, was reported. This is explained by the experimenter as being due partly to the amino acid character of methionine, and partly to the favorable effects of the drug on hepatic function.

Other New Developments

Rats exposed to benzene were protected by the addition of methionine to the diet, a recent paper states. It was also found that irrespective of exposure to benzene, rats deficient in protein grew more, consumed more food, had higher hemoglobin levels, and had smaller livers with less fat content when fed on diets supplemented with methionine than on ordinary diets.

Two South American investigators have found that the mortality rate of rats suffering from experimental diabetes is decreased when methionine is added to the diet. Tissue changes in the capillaries as well as the corneas of rats' eyes have been observed in methionine-deficient diets, indicating that there is a close relationship between the health of the eye and methionine intake. It is also reported that the addition of methionine to a milk diet increased the retention of vitamin C in rats.

INCREASE IN POULTRY GROWTH is obtained when methionine is used as an adjunct to soybean meal. There also may be some correlation between methionine - intake and egg production. Wide use is foreseen for this vital amino acid in enriching feedstuffs.

TECHNICAL DEVELOPMENTS

Further information on these items may be obtained by writing to U.S.I.

To lay plastic tile, a new rubber-plastic cement has been developed which is claimed to adhere the tile to almost every type of surface. **(No. 214)**

USI

A new activated bleaching clay is now being offered for the decolorizing of vegetable, fish, animal, nut, and petroleum oils, as well as for the recovery of dry cleaning solvents. **(No. 215)**

USI

A salt substitute, which is described as an odorless, white, crystalline powder containing no sodium and having a salty flavor, has been developed to meet the new medical concept of salt-free diets. **(No. 216)**

USI

A new, fast-drying printing ink, expected to simplify and speed-up printing methods and processes, has been developed. **(No. 217)**

USI

Rot and termite protection for wood are offered by two new products. The first is a compound said to be particularly applicable to wood which comes in contact with the soil. The second is a machine which is designed to apply preservative liquids to both sides of plywood and lumber at the same time. **(No. 218)**

USI

A shoe leather substitute is described as a fiber which can be tanned and bonded. **(No. 219)**

USI

An odorless anti-corrosion finish, alleged to dry by evaporation without an oxidation period, is applicable for use in steel plants, chemical plants, food packing houses, dairies, or breweries, the manufacturer states. **(No. 220)**

USI

A new series of thermosetting plastics, require only very moderate temperatures and no pressure to cure, according to the manufacturer. The plastic is said to have excellent electrical, chemical, and optical properties. **(No. 221)**

USI

To provide permanent label identification, a new adhesive, developed for use on all types of containers, forms a clear protective film over the label, according to the manufacturer's claims. **(No. 222)**

USI

To remove carbon deposits, a solvent has been developed which is said to leave a protective film against rust. **(No. 223)**

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Clark Succeeds Bohan

The election of Stanley I. Clark as a vice president of Sterling Drug Inc., in charge of the Centaur Company division, has been announced by James Hill, Jr., president. For the past three years, a divisional vice president in the Bayer Company division, Mr. Clark succeeds the late Joseph D. Bohan.

Born in Baltimore in 1896, Mr. Clark was graduated from Johns Hopkins University, where he received the B.A. degree. He took postgraduate work at the Army Medical School at Yale, and during World War I served as a Lieutenant in the Sanitary Corps, U. S. Army.

He joined Sterling in 1943 after four years' service with This Week Magazine. He also was general manager of Admiracion Laboratories division of National Oil Products Company, sales manager of Lehn & Fink Inc., and director of research of Joseph Richards Company.

Eck Appointed Plant Manager

John R. Eck, assistant plant manager of the Monsanto Chemical Company's Trenton, Mich., plant, has been named plant manager. He succedes James A. Wilson, who is being transferred to the plant at Everett, Mass., as plant manager.

Mr. Eck a native of Denver, Pa., was graduated from Penn State College in 1936 with a B.S. degree in Chemistry. He came to Monsanto later that year as a research chemist. In 1940 Eck became a group leader at Dayton and in 1942 he became a project manager.

Coutin Appointed Vice President

Pierre J. Coutin has been appointed vice president in charge of sales and purchases for Roure-Dupont, Inc.

Mr. Coutin joined Roure Bertrand

PIERRE COUTIN

Fils & Justin Dupont, Grasse, in 1927. After spending a year in the company's factories, he was appointed their representative in Japan where he resided for two years. Upon his return in 1930, he held various positions at the Argenteuil plant and the Paris office of the same company.

Later he was appointed sole agent for the entire Far East territory, a position he held until 1938. In this capacity he traveled extensively, not only over the Far East, but also in South and West Africa.

Mr. Coutin joined the Free French Army immediately after the French Armistice and for 2 years he was liasion office with U. S. Headquarters in China. He was discharged in August 1945 with the rank of Major.

In 1945, he came to New York and since June 1946 has been handling purchases and sales for Roure-Dupont Inc.

Chem. Salesmens Golf

The first golf meeting of the Chemical Salesmens Association was held at the Huntington Crescent Club, Huntington, L. I., with 150 attending and better than 100 participating in the golf matches. Those winning prizes were: Door prize, Jim Ferris; Low gross Flight A,—Gene McCauliff; B—S. W. Stanton; C—Don Carlo; Low net Flight A,—Bob Miller; C—L. Swentzeel; Longest drive, C. F. Alexander; Nearest to pin, Joe Aveles; High blind hole, I. Inman; Low blind hole L. Brennesholtz.

Kickers: 1—J. B. Eakins; 2—R. A. Kramer; 3—M. D. Vaccaro; 4—Al Loeffler. Non Golf Putting contest—Jack Conover.

Guests: Low gross—J. Des Rasmer; Low net—W. C. Russell; Kicker—E. W. Phillips.

Maurella Products Buys Kidmetics

Maurice Handman, president of Maurella Products Co., Inc., 100 Varick St., New York, has announced that his company has acquired control of Kidmetics, Inc., manufacturers and distributers of Kidmetics.

Dr. Burbage Promoted

Dr. Joseph J. Burbage has been promoted to assistant laboratory director of Monsanto Chemical Company's central research department in Dayton, Ohio. These are the units operated by Monsanto for research on important phases of the atomic energy program. Dr. Burbage has been associated with this work since its inception at Monsanto in 1943.

Doerr Heads Foundation for Pharm. Education

The American Foundation for Pharmaceutical Education at its annual meeting May 28, announced that the following officers were elected to serve for the current year. George V. Doerr, president; C. S. Beardsley, vice president; S. B. Penick, Sr., treasurer; E. L. Newcomb, secretary.

The executive committee for the current year consists of the above named and the three following: Edgar S. Bellis, Dean H. E. Kendig and Dr. R. L. Swain.

Dr. Edward L. Bortz, president of the American Medical Association, receiving the first cover of the commemorative stamp "The Doctor" mailed by Wyeth Incorporated on the first day of issue.

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BIMS Golf Match

When the BIMS held their golf tournament on June 19, the weather was perfect and 79 members and guests engaged on a hard fought tussle on the golf links. Prize winners were: Harry Heister, George Luecders & Co.; Walter Jamieson, Wallace Paper Box Co.; Russell Boland, Topics Publishing Co.; George Dunn, Smith & Nichols, Inc.; W. Edsall Terry, American Coating Mills, Inc.; Fred W. Webster, Van Ameringen-Haebler, Inc.; Charles Vetterlein Elmo Sales Corp.; Frederick L. utz, White Metal Mfg., Co.; Russel F. Rooks, Allied Products Co.; Randall Naumann; C. R. Keeley, Beauty Fashion; Ross A. White, E. N. Rowell Co.-A. H. Wirz, Co.; Ivon H. Budd, Ungerer & Company; John Cavalero. Stelz Company, Inc.

Monsanto's New Houston Branch

Establishment of a sales office for the State of Texas, with Harvey M. Harker as general branch manager has been announced by the Monsanto Chemical Company. Headquarters of the new office will be in Houston.

Mr. Harker, who was first employed by Monsanto in 1918 as an assistant plant manager, rejoined the company in 1926 as director of purchases. He has been assistant general sales manager of the organic chemicals division, at St. Louis, since 1931. He is a native of Argyle, Wis., and is a chemical engineering graduate of the University of Wisconsin.

Weaver Made Assistant Export Mgr.

Edward W. Weaver has been appointed assistant export manager of Bristol-Myers Company, for the Latin-

EDWARD W. WEAVER

American division. Mr. Weaver has had wide business experience in Latin America. For five years prior to joining Bristol-Myers he was manager of the Puerto Rican branch of Sterling Products International, in San Juan.

He is a native of White Plains, N.Y., and received his education in Yonkers schools.

Boyle & Co. Expansion

The export division of Boyle & Company, Los Angeles, has added two more distributors to promote its trade expansion.

For India, Saiga & Company of Bombay, has been appointed, and for the Philippine Islands the Soriano Trading Company have been appointed to act as distributers for Boyle products.

Two Promoted by Bristol-Myers

J. T. Wallace, Jr., assistant branch manager of Bristol-Myers Chicago office for the past year and a half, has been appointed branch manager there. He succeeds the late Valie P. Weber. At the

J. T. WALLACE Jr.

same time it was announced that Rudolph R. Schirk has been made assistant branch manager.

Mr. Wallace has been with Bristol-Myers Company for ten years. A native of Carthage, Mo., he received his schooling there and at the University of Missouri. He came with Bristol-Myers as a sales representative and covered Iowa and the St. Louis territories until his promotion to assistant branch manager in 1946. He served in the Navy for three years, and saw extensive service in the Pacific.

Mr. Schirk is a native of Pittsburg, Kan. He attended the University of Kansas, leaving before graduation to serve with a medical detachment in France during the first world war. Following ten years' experience in drug stores and sales work, he joined Bristol-Myers in 1929. As a sales representative he covers the Chicago area until his promotion to assistant branch manager.

MacVeagh Made Treasurer

Mallinckrodt Chemical Works has appointed Charlton MacVeagh as treasurer of the corporation. Mr. MacVeagh, who joined the company a year and a

CHARLTON MacVEAGH

halfago and was made assistant treasurer in July 1946, was graduated from Harvard in 1924 and from Oxford University in 1926.

Mr. MacVeagh is the son of the late Charles MacVeagh, American Ambassador to Japan, 1926 to 1929. His brother Lincoln MacVeagh is the present Ambassador to Greece. From 1927 to 1935 and from 1939 to 1942, he was engaged in investment banking in New York. In 1942 he joined the Materials division of the War Production Board. From 1943 to 1946, as a civilian in the War Department, he was deputy director of the readjustment division of the Army having the responsibility for the settlement of all the Army's terminated war contracts.

Packaging Convention

Packaging Machinery Manufacturers Institute will hold its Fifteenth annual meeting October 6 and 7, 1947 at the Hotel Sheraton, Springfield, Mass. George A. Mohlman, president of the Package Machinery Company, is chairman of the Committee on Arrangements.

N. Y. Aromatics Corp.

The New York Aromatics Corporation, 153 Waverly Place, New York 14, has taken over all interest of the business formerly known as New York Aromatics Company., located at the same address.

K. G. Kalmbach will continue to direct the policies and activities of the new organization in his new capacity as president of the corporation.

Associated Products Reorganized

Associated Products, Inc., on June 23 filed a petition for reorganization in the United States District Court. The petition followed an involuntary petition in bankruptcy filed by creditors June 20. Judge Philip L. Sullivan entered an order continuing the present new managment of the company. The judge also allowed the new management to continue normal operation of business and to make necessary purchases, loans and expenditures.

The court authorized the company to borrow up to $250,000 from Nathan Cummings without interest. The capital stock was acquired early this month by Cummings through default in the payment of a loan made to Associated Products. The stock had been pledged as collateral for the loan

The new officers, who are continued in their positions, are Morris Levinson, president and Fred Buwen secretary.

Total amount of liabilities, secured and unsecured, is approximately $5,000,000 of which claims of unsecured general creditors are believed to be in excess of $3,000,000. Assets available for general creditors are believed to be less than $750,000.

Monsanto Advancements

Promotion of Frank Reese to lead the research mechanical development group has been announced by Dr. N. N. T. Samaras, director of plastics research for the Monsanto Chemical Company. Reese has been group leader in charge of pilot plant operation and is being replaced in this work by Eli Perry.

Mr. Reese, a native of Pennsylvania, received his B.S. degree in chemical engineering from Purdue in 1941. He joined Monsanto as a research chemist and was placed in charge of pilot plant operation in August 1944.

Mr. Perry, a graduate of the University of Pennsylvania and a research engineer with the plastics division has just returned from a year's academic leave, studying at the Massachusetts Institute of Technology and received his master's degree.

Irwin Hoff with Biow Co.

Irwin W. Hoff has joined the Biow Company, New York, as an account executive. He was formerly associated with the Block Drug Company, and the director of the baby products division, Johnson & Johnson.

Lamont, Corliss Appointments

The appointment of Edward D. Lane as sales manager, H. Kenneth Philips to the new office of merchandise manager, and G. Lloyd King, vice president and former general manager, to the new office of director of sales have been announced by Lamont, Corliss & Company.

In their new positions Mr. Lane and Mr. Philips will share the sales responsibilities of all Pond's cosmetics and Nestle's chocolate sales under the leadership of Mr. King, who this May celebrated 43 years of service with the company.

Mr. Lane joined the organization in 1933 as Atlanta representative. From there he went to Cleveland, in 1937 was appointed field manager, and in 1945 sales promotion manager.

Mr. Philips joined the firm in 1926 as a sales assistant for Pond's. During the war he worked with the laboratory of the Quartermaster Depot in Chicago and Washington, and with the Navy Department in developing chocolate rations for wartime use.

Henderson Returns from Australia

Ralph Henderson, divisional vice president, Frederick Stearns & Co. Division, Sterling Drug Inc., has returned to this country from a flying trip to Australia and New Zealand.

He reported that there was extensive expansion of the company's plants, necessitated by sales increases in those two countries.

Construction has been started and should be completed in August for a new laboratory building in Auckland, N. Z. In Sydney, Australia, excavations have begun for a new 4-story building fronting the present Stearns plant in that city. It should be completed by the end of this year.

Mr. Henderson spent five weeks on the trip, including flying time and conferred with Noel F. Leggatt, general manager for Stearns in New Zealand and Australia.

Dr. Reichert Named Director

Dr. Philip Reichert has been appointed director of the professional department of Doherty, Clifford & Shenfield, Inc. He is a former Fellow of the Rockefeller foundation for medical reaserch.

Specializing in the field of medical advertising to the profession, the department has engaged William G. Meek as art director; Edward W. MacFarland as production manager and Robert E. Wilson as copy head.

Mrs. Strieby Named Head of Librarian Assn.

Irene Macy Strieby, librarian of the Lilly research laboratories of Eli Lilly and Co., is the new president of the Special Libraries Association. Mrs. Strieby, who served last year as first vice president, took office at the annual meeting of the association in Chicago. Nearly a thousand special librarians of business and industrial organizations, newspapers, hospitals, museums and research institutes attended the meetings.

Best Gets Degree

For the first time in the 124 years of its history the Massachusetts College of Pharmacy conferred an honorary degree of Doctor of Science in Pharmacy. Recipient of this honor was Samuel M. Best, president of Potter Drug & Chemical Corporation, Malden Mass,.

Mr. Best, who is himself a graduate of the Massachusetts College of Pharmacy, receiving the PH.C. degree in 1907, is vice president of the Board of Trustees and chairman of the finance committee of the institution.

Herbert Gray

Herbert Gray, founder of the Bickmore Company, and father of M. H. Gray, the present treasurer of the firm, died May 24.

Mr. Gray had celebrated his 93rd birthday in March of this year. He founded the Bickmore Company and upon its incorporation in 1892, was elected a director. In 1928 he was elected president of the firm and continued in these two offices until his death.

Warner James

Warner James, sixty-nine, vice president of Townes & James Inc., wholesale druggists, died June 22 at his home, 203 Marlborough Rd., Bklyn.

Mr. James had entered the drug business with his two brothers, Halsted and John in 1898. He was a member of the board of control of the National Wholesale Druggists Assn., a director of the Druggists Supply Corporation and a trustee of the Brooklyn College of Pharmacy.

Surviving besides his brothers, are his wife, a daughter and three sons.

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Aluminum tube shipments, first quarter 1937
Aluminum tube shipments, first quarter 1947
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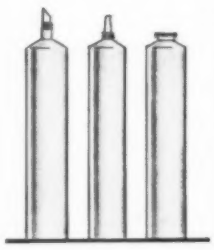

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Production Forum

By Francis Chilson

Industrial Consultant

The Taft-Hartley Bill

To those of you who did not receive the epitome of the Taft-Hartley Bill prepared by the American Pharmaceutical Manufacturers' Association, I am passing along the following information which you can paste in your hat. The bill certainly eliminates a lot of labor abuses and takes the gag out of the employer's mouth.

NLRB: Expanded from three to five members. Made subject to Senate confirmation.

Conciliation Service: Made independent of the Labor Department.

Closed Shop: Outlawed.

Union Shop: This practice, making all workers join the union, is permitted only if a majority votes for it.

Check-Off: Permitted only if individual worker voluntarily authorizes it.

Foreman: Employers no longer required to bargain collectively with them.

Bargaining Units: Professional employes and craft units guaranteed the right to stay out of plantwide or companywide unions.

Unfair Labor Practices: Unions barred from coercing workers into joining; from refusing to bargain collectively; from charging unreasonable dues or initiation fees; from asking employers to discriminate against workers for reasons other than non-payment of dues; from engaging in jurisdictional and feather-bedding strikes and secondary boycotts. (The Wagner Act has outlawed only unfair practices by employers.)

Injunctions: NLRB empowered to obtain them against unions, as well as against employers.

Damage Suits: Can be brought against unions by either employers or other unions for breach of contract and illegal strikes and boycotts.

Picketing: Preventing anyone from entering or leaving a strike-bound plant is prohibited.

Cooling-Off Periods: Sixty-day strike notice required.

National Paralysis Strikes: Government allowed to halt by injunction, for 80 days, strikes or lockouts which imperil national health and safety.

Strikes Against Government: Strikes by Federal employes forbidden.

Union Political Contributions: Banned in national primaries and elections.

Communists: NLRB barred from accepting a union case unless all officers file affidavits that they are not Communists.

Union Reports: Must be filed with Secretary of Labor. Must include detailed financial statements, officials' salaries, amount of dues, restrictions on memberships, and methods of choosing officers and authorizing strikes.

Welfare Funds: Employer contributions illegal unless jointly administered.

Employer Free Speech: Guaranteed in labor matters unless employers attempt intimidation.

Heat Loss

A typical example of the inadequate thinking which goes into the preparation of building plans was encountered the other day in a discussion with a friend of mine, who informed me that although in general, he accepted my ideas regarding the economy of building one-story structures, he had, nevertheless, built a two-story building because it was to be erected in Canada and he was motivated in doing this by a desire to cut down the heat loss through the roof. It is true, of course, that a two-story building will have half the roof area of a one-story building of the same square footage. But my friend, in saving roof area, added a lot of extra wall space, plus a lot of extra windows, and anyone who knows anything about heat loss, realizes that it's much greater through a masonry wall than it is through an insulated roof and it's ten times as great through windows as it is through such a roof. I think when my

friend actually puts the figures down he will find that he isn't saving as much heat as he thought he would. If however, the two-story unit had been constructed entirely without windows, and if further, the inner course of the masonry wall consisted of some form of hollow tile construction, there would have been a definite conservation of heat, but this apparently was not done.

I think my friend forgot that in cold climates snow accumulates on a flat roof deck, and that snow, itself, is a good insulant. Snow will not accumulate on a side wall or on a window. The side walls are exposed to all the winds that blow and they stand out bare and naked against the cold blasts of old Boreas.

Construction Costs

In discussing the merits of one type of building versus another, it is always difficult to get accurate comparative cost estimates. When I was in Australia, it was interesting to note that the same conditions which prevail here, hold true there also. In Australia construction costs are about two-thirds of what they are here. I obtained from the office of Harry A. Norris, Australia's leading architect who does all the architectural work for Nicholas Limited, a table of comparative costs which is set forth below. These costs were based on a building of 35,000 square feet gross. The building actually was designed as an eight, a four, a two, and a single story. The details of the cost elements are set forth in the table below. The estimates do not include costs of floor finishes, electric lights, lavatories, mechanical ventilation, air conditioning, fire protection or drainage. The figures given are in Australian pounds, but the ratios hold as true as if the tabulation was in dollars.

When comparing the figures for the floor slabs, please note that the figure given for "floor slabs and roof" in the columns for the eight-story and the four-story buildings represents the cost of all the slabs together. In the case of the two-story and the single-story, the figures are separately given. The figure for earthquake construction is required under the building code of New Zealand, which requires that a building has to be designed to take a horizontal thrust on each floor equal to ten percent of its dead weight plus the live load.

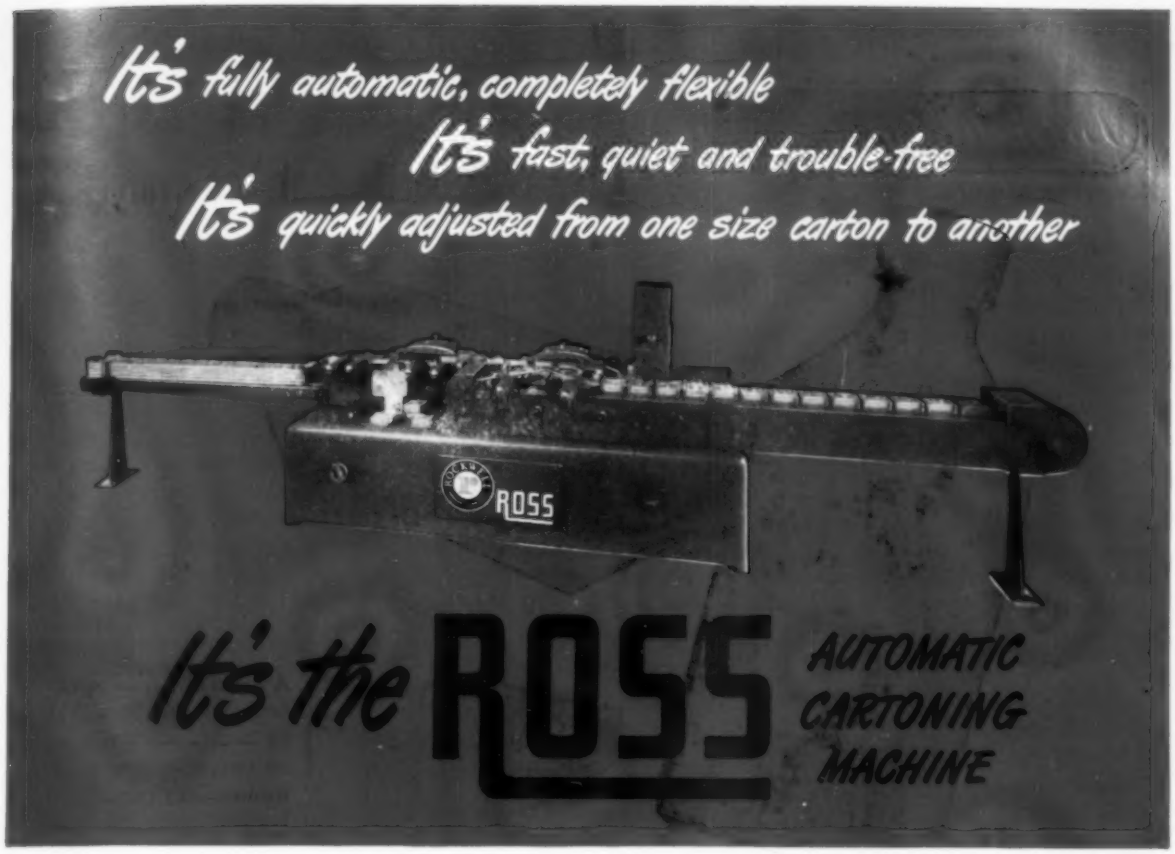
As you can see from the comparison of the figures, there is a very considerable difference in the cost per square foot gross in each of the four examples. (See Schedule Below).

It is unfortunate that I do not have the figures for the area taken up by stairs, columns, elevators, etc., so that we could get a direct comparison of the net cost per square foot. Of course, in the case of the one-story building, all of the space is net space with the exception of a negligible amount for columns.

Schedule of Comparative Building Costs

	Multi-Story Building 8 Floors	Four-Story Building	Two-Story Building Concrete 1st Floor Saw Tooth Roof over	Single-Story Building Saw Tooth Roof
Excavation	240	480	240	240
Foundations	1,000	1,000	1,000	1,000
Basement Slab	720	1,450	none	none
Ground Floor Slab	*	*	3,000	5,400
First Floor Slab	*	*	6,000	none
Floor Slabs and Roof	11,500	11,500	**	**
Roof Finish	960	1,680	7,010	14,020
Walls	6,000	4,600	4,000	2,500
Front Elevation	1,400	1,400	1,000	500
Glazing and Frames	4,000	4,000	3,000	1,000
Stairs	800	400	300	none
Elevators incl. Motor Room	9,800	8,050	3,000	none
Caretaker's Quarters	1,800	1,800	1,800	1,800
Earthquake Construction	6,000	5,400	3,000	1,500
TOTALS	£44,220	£41,760	£33,350	£27,960
Cost per Sq. Ft. Gross	£1.26	£1.19	£ .95	£ .79

*Included in "Floor Slabs and Roof"
**Included in "Roof Finish."


It's fully automatic, completely flexible
It's fast, quiet and trouble-free
It's quickly adjusted from one size carton to another
ROSS
It's the ROSS AUTOMATIC CARTONING MACHINE

THE ROSS AUTOMATIC

PACKAGES PRACTICALLY ANYTHING YOU CAN CARTON BY HAND!

Here are a few of the commodities now being successfully cartoned by Ross machines. **BOTTLES**, from pill size up to one quart capacity . . . **CANDIES** . . . **COLLAPSIBLE TUBES** . . . **TOY PISTOL CAPS** . . . **COMBS** . . . **TOOTHBRUSHES** . . . **MASON JAR CAPS** . . . **RADIO TUBES** . . . **GAUZE BANDAGES** . . . **DEHYDRATED SOUPS AND CAKE MIX** in cellophane bags.

A. H. ROSS COMPANY, Inc.

PACKAGING MACHINERY

Subsidiary of Rockwell Manufacturing Company

Ludlow, Kentucky

Here's the Ross way—the *new* way to carton everything from pill bottles to rubber heels—quickly, quietly, economically. This machine almost magically erects the carton, feeds the product into it, tucks both ends or optionally glue seals either or both ends. And it may be had with literature inserting and code imprinting attachments.

The Ross machine is superior to all others in the matter of in-built flexibility. It can be converted from one size cartoning operation to another in a matter of minutes. There are no parts to remove and replace when effecting a change-over. It's done by simply setting dial controlled movable units against calibrated scales. Charted positions for any specified size carton within range are furnished with each machine.

Learn all about this smooth operating, gentle handling, cartoning machine—how it can be *profitably* put to work for you. Just mail the attached coupon for complete information.

SEND THIS COUPON TODAY

A H. Ross Co., Inc. A
Ludlow, Ky., U.S.A.

Gentlemen: Please send me *without obligation*, a copy of the Ross catalog and complete engineering and performance data on Ross cartoning machines.

Company_____

Street_____

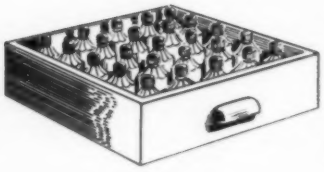
City_____ Zone_____ State_____

Your Name_____

Introducing the new

KNOX Rx OVAL

the bottle that has everything!



Easy to Stock

A gracefully styled squat container, the Knox B Oval can be stocked in drawers or on shelves in larger quantities than ordinary prescription bottles.

Self-Advertising

The Knox Perma-Letter system fuses the druggist's name and phone number right to the glass itself in bright color. Can't wash off or rub off.

Handy at Home

The Knox Oval fits the shelves of any ordinary household medicine chest, however shallow. Also handily carried in pocket or bag.

Separate Directions

Typed directions for taking or administering the prescription can be pasted firmly to the convex side of the Knox Oval. This gives more room for detailed instructions.

For details of prices and deliveries, see your nearest Knox representative or write directly to

KNOX GLASS ASSOCIATES, INC., Knox, Pa.

Knox Group operating twelve modern plants strategically spotted throughout the United States

Industrial Showplace

The new Johnson and Johnson baby products plant located on a thirty acre lot at Cranford, N. J., is considered by architects and builders to be the last word in industrial buildings. This newest structure of the firm is part of a wide scale modernization program fostered by Gen. Robert Wood, chairman of the board who believes that factories should be both beautiful and utilitarian.

The building itself is an industrial showplace, of unglazed speed wall tile, trimmed with terra cotta and aluminum. It has continuous strip of windows, all double glazed to permit adequate air-conditioning. The glass is light refracting and cuts down glare. The building has a total area of some 120,000 square feet and is 250 feet wide by 315 feet long and is a single story structure to permit efficient manufacturing operations.

The interior arrangement of this new plant is unusual in many respects. All employees and visitors enter it through a single entrance into a large and attractive reception lobby and lounge, which is partitioned off

from the manufacturing area by a large glass window through which there is a full view of the manufacturing operations, rather like the open prescription department of an ethical drug store. At the end of the corridor leading from the lounge is the employee's cafeteria, an after-luncheon employees' lounge and a completely equipped modern kitchen. Adjacent to the cafeteria is the plant broadcasting system which carries wired musical programs, radio broadcasts and announcements.

There are six manufacturing lines where the various baby products are automatically mixed, manufactured and packed ready for shipment. Raw materials are fed into individual production lines from the warehouse section of the building. The manufacturing area, made up of a single room 50 feet wide by 285 feet long, is devoid of columns or posts, has acoustical ceilings and is air-conditioned throughout. All machinery and equipment here is completely enclosed. The machinery is laid out in a "U" shape so the operations which are cumbersome and involved can be carried out in the warehouse area of the building rather than in the manufacturing section.

Once the products have been manufactured, a system of conveyors and chutes brings them to the packing line, and another conveyor line carries the packed products to the various case sealing machines, from there they are then brought to the warehouse section to await shipment. All conveyors are controlled from a central panel board. Another panel control board, through a system of glass tubes and flashing lights, shows the amounts of liquids used in various manufacturing processes and indicates the state of progress of these operations, thus permitting rigid control and quality standardization of all products.

The plant has a color scheme, which was worked out by experts in the psychology of color. Floors, walls and equipment are of colors known to minimize fatigue and eye strain.

Throughout the plant one sees evidences of the emphasis placed upon employee welfare. Employees have their own lounges and showers. The entire plant is air-conditioned, except for the warehouse area. Acoustical ceilings make for quiet working conditions. The grounds are being landscaped and include private driveways and special parking areas.

Gay Paree

By the time you read this, I'll be strolling down the Champs d'Elysees in Paris. This trip represents the second of my hegiras on behalf of Nicholas Proprietary Limited. As part of their world-wide expansion plan, a new plant of considerable proportions is to be built in Paris to supplant the old one which has become completely inadequate. My headquarters, while off duty, will be 14 Rue Blondel unless they've closed the place up since the war. They tell me that economic conditions in France are so bad these days that Frenchmen can't afford to have any fun any more. I'll look into the matter and let you know.

On the same trip I expect to visit Dublin, where another Nicholas plant is to be erected; London, where the largest of the Nicholas' plants is located, and also Switzerland. So while you poor blokes are stewing in your own juices in the steamy heat of August, I'll be airing my symmetrical torso on the Riviera.

The following information is supplied by manufacturers of the equipment described and claims made below by these manufacturers are passed along for what they are worth. Presentation of such notice in this department is not to be taken as endorsement of the claims or of the equipment.

Tablet Counter

You undoubtedly have seen or used the Electro-Pack Tablet Counter. A lot of people are having excellent results with this little inexpensive job. It consists of a tilted rotary disc which rotates through a supply of tablets. The tablets drop into holes in the disc which are grouped to give the requisite count. The disc rotates over a solid bed which has an opening at one

IT'S LIKE PIPING AIR FROM THE POLAR ICE CAP

Year 'round dew point of -60° F.

Your processes don't have to suffer from seasonal heebie jeebies caused by high humidities. Feed dry air into your plant and have "winter weather" the year around.

Lectrodryers deliver all the dry air you need, at dew points as low as −100° F., if necessary. Working with automatic controls, they maintain constant humidities in workrooms, equipment and warehouses.

What's your humidity problem?

Tell us where you need dry air, in what volume and at what dew point. Our engineers will recommend the cure. Quite likely, there's a standard Lectrodryer ready to step out of the catalog and handle the job for you.

Write Pittsburgh Lectrodryer Corporation, 309 32nd Street, Pittsburgh 30, Pennsylvania.

In England: Birlec, Limited, Tyburn Road, Erdington, Birmingham.
In Australia: Birlec, Limited, 51 Parramatta Road, Globe, Sidney.

Type CH Lectrodryer

LECTRODRYERS DRY WITH ACTIVATED ALUMINAS

LECTRODRYER

REGISTERED TRADEMARK U.S. PAT. OFF.

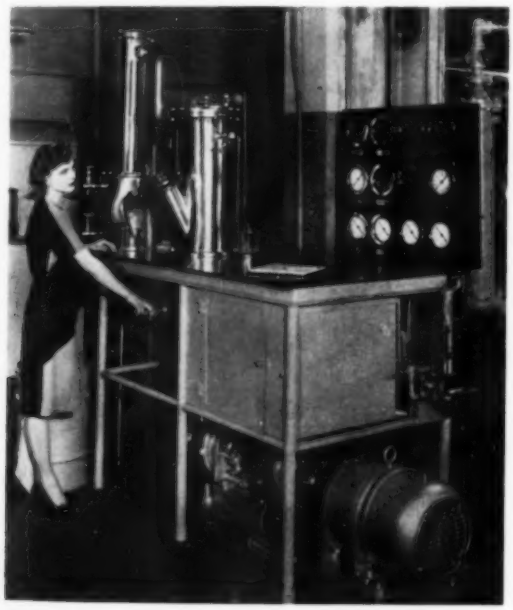
point above the feed hopper so that as the tablets are brushed into the perforations in the disc, rotation beyond this point brings the perforations into line with the opening to the bed of the machine, causing the tablets to drop out of the perforations into the bottles. For every size tablet there must be a separate disc and also one for every count. One girl can feed from 500 to 1,300 bottles per hour, depending upon the count and the size of the tablets. I haven't had any experience using this machine on uncoated work, but it works very well on coated products. The machine is made by E. B. Fairchild & Company, 907 Northwestern Avenue, Los Angeles 27.

Forced Circulation Evaporator

The small pilot plant shown here is a research tool built by Buflovak Equipment Division of Blaw-Knox Co., Buffalo, N. Y. It is a forced circulation evaporator for use in concentrating viscous materials to higher densities than is possible with natural circulation units.

With such equipment in its laboratory, a company can study any material adapted to this type of processing. The pilot plant is useful in predetermining design and process controls of commercial units for the chemicals, food and process industries.

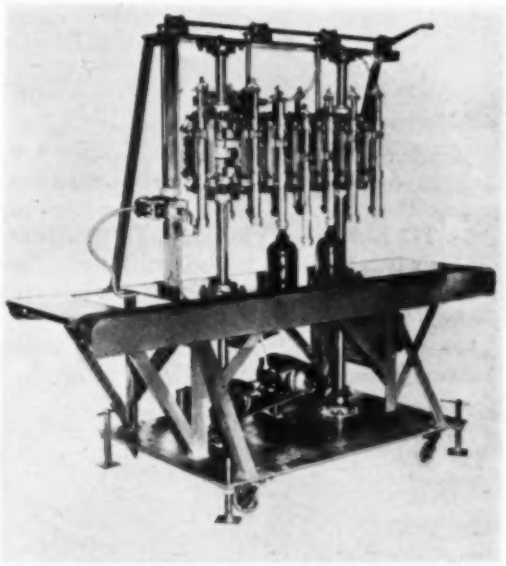
Various gauges show conditions prevailing within, and this complete instrumentation permits studies of the thermodynamics encountered in evaporation processing. The unit has a small holding capacity so that complete data may be obtained from one drum of



material to be tested. Built entirely of stainless steel and embodying the latest sanitary features, the evaporator is adaptable to all food products and other materials that might be affected by metal contamination.

Bottle Gauging Machine

A successful production line test has just been completed on an automatic bottle gauging machine, designed, engineered and built by Russell & Thompson Manufacturing Co., 507 Orange St., Newark 7, N. J.



This machine automatically passes through the neck opening of bottles and gauges the size of the neck, a procedure that is necessary to control accurate and easier filling. It does this at the speed of 225 bottles per minute as compared with 60 bottles per minute by hand process. The machine, automatically controlled is said to increase bottle production 40 per cent with negligible rejects.

Screw Capping Machine

Tite-Cap Machine Co., Inc., 1 Franklin Square, New York 7, has come out with Tite-Cap, a single head fully automatic screw capper, which operates on a straight line. It will handle about sixty containers per minute even including jars with large caps such as cold cream jars. It is equipped with an adjustable speed arrangement so that the output may be reduced according to needs.

The Tite-Cap uses an extra large hopper for the caps thus insuring an adequate supply with a minimum of attention. Adjustable tension device controls tightening of the caps.

Bottle holders and timers, made for each size and shape of container, are easily and rapidly changed over. Adjustable side rails guide containers along the moving chain. The Tite-Cap is equally suitable for tin cans as well as bottles, jugs and jars.

Zephyrweld Catalog

Tri-Clover Machine Co., has published a new 16-page catalog on stainless steel fittings, offering clear, concise data on such subjects as physical characteristics,

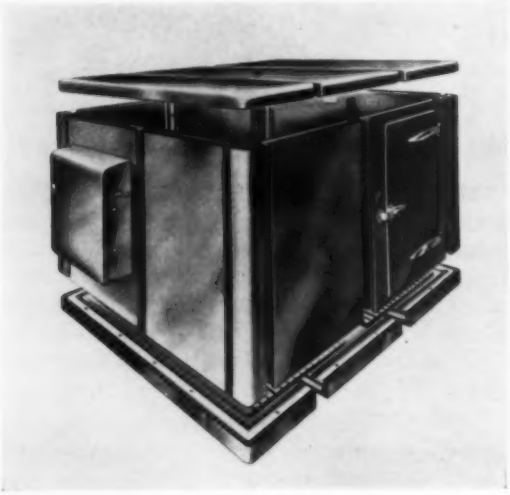
fabrications, and adaptability tables, bursting pressure data, and complete information covering the methods in which these new fittings are installed with light gauge commercial tolerance, stainless steel tubing to provide corrosion-resistant liquid conveying lines.

Copies may be obtained free of charge by writing Tri-Clover Machine Co., Kenosha, Wis., requesting Catalog 747.

Prefabricated Coolers

The Refrigeration Engineering Corporation has announced production of its new line of Reco-Fab aluminum coolers for low and medium temperature storage. These sectional coolers are produced in two widths. The Eighty Series in an 8 foot, 6 inch width, in sizes from 192 cubic feet to 1420 cubic feet. The One Twenty series in a 12 foot, 1 inch width, in a range of sizes from 287 cubic feet to 3360 cubic feet.

The sections comprising the cooler are constructed on a hardwood framework, treated with waterproof and



rotproof compound. They are then insulated with 6 inches of fibreglass, sealed with a vaporproof barrier and clad in sheet aluminum. The coolers are light in weight and any single panel can be easily lifted by two men.

Panels comprising the cooler are assembled by means of lag and pod connections. The boxes can be taken apart, moved and reassembled easily without damage, and can be enlarged by additional panels.

Additional information concerning these coolers may be obtained by contacting Refrigeration Engineering Corporation, 2024-26 Market St., Philadelphia 3, Pa.

Carbomatic Heating Unit

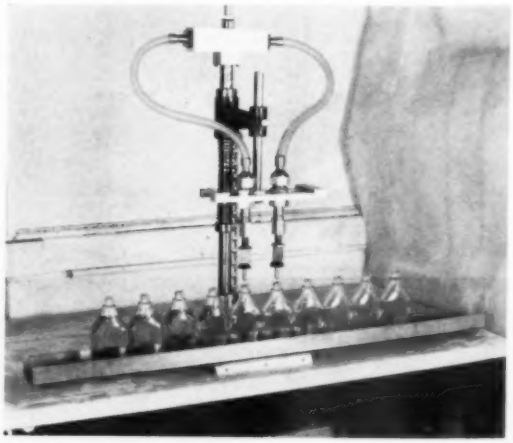
My old friend, E. B. Blue of New Canaan, Connecticut, is the representative for the Carbomatic Radiant Infra-Red Gas Burning Generator, as illustrated in the photograph. This consists of a trough lined with a refractory material against which is directed gas jets, in such a way that the refractory material becomes incandescent. Hence, infra-red rays are radiated into the drying chamber. These units could easily be applied to spray dryers, and are now rapidly replacing infra-red drying units which are designed with bulbs,

especially in the automobile industry where the maintenance of the infra-red lamps is a very costly and continuous performance.

Twin Filler

This table model twin filler works on the same filling principle as larger straight line fillers. It fills automatically to any desired level bottles ranging from one-half ounce to a quart. It is also equipped with adjustable bottle track guides, with foot pedal operation, thus freeing the hands of the operator.

The machine can be used for filling by gravity, vacuum, pressure, and handles thin or viscous solutions with the speed of about 800 to 1500 bottles per hour, depending on the type and capacity of bottles.

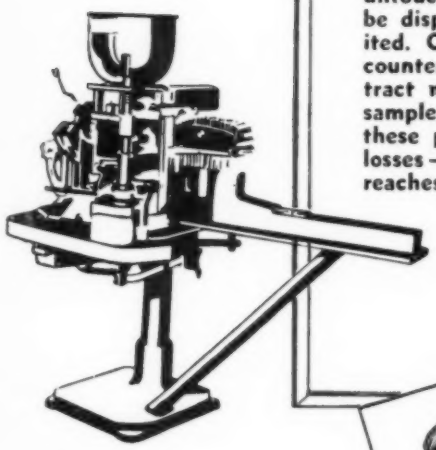


The flexibility of the machine allows the advantage of being able to fill not only in the straightline manner, but also into the individual bottle cases or trays and using it as a hand unit. For information write Perl-Oussani, Machine Mfg. Company, 68 Jay St., Bklyn 1.

BROWN BAG *Packeting*

A FORMULA FOR GREATER SALES

New sales outlets and greater profits from any free flowing product such as pills, granules and powders go hand in hand by packeting with Brown Bag Filling Machines and attractive Brown packets. With Brown packets you can reach new, untouched outlets, where ordinary packages can't be displayed, to make sales possibilities unlimited. Colorful Brown packets move quickly on counters, display cards, racks and tables — attract new customers. They also prove ideal as samples. With Brown equipment you can fill these packets uniformly, economically, without losses — and they protect your product until it reaches the consumer.



BROWN BAG PACKETS SELL YOUR PRODUCTS *Faster*

Open-end envelopes printed in eye-catching colors in sizes to your own specifications by Brown Bag sell your products faster — build bigger profits. Place your next order for packets with Brown Bag and see the difference.

BROWN BAG FILLING MACHINE CO., INC.
FITCHBURG, MASSACHUSETTS
MANUFACTURERS OF OPEN END ENVELOPES, PACKETS AND PACKAGING MACHINERY
West Coast Representatives — Peter D. Bowley & Assoc., 369 Fifth St., San Francisco, California

8 FEATURES YOU SHOULD KNOW ABOUT

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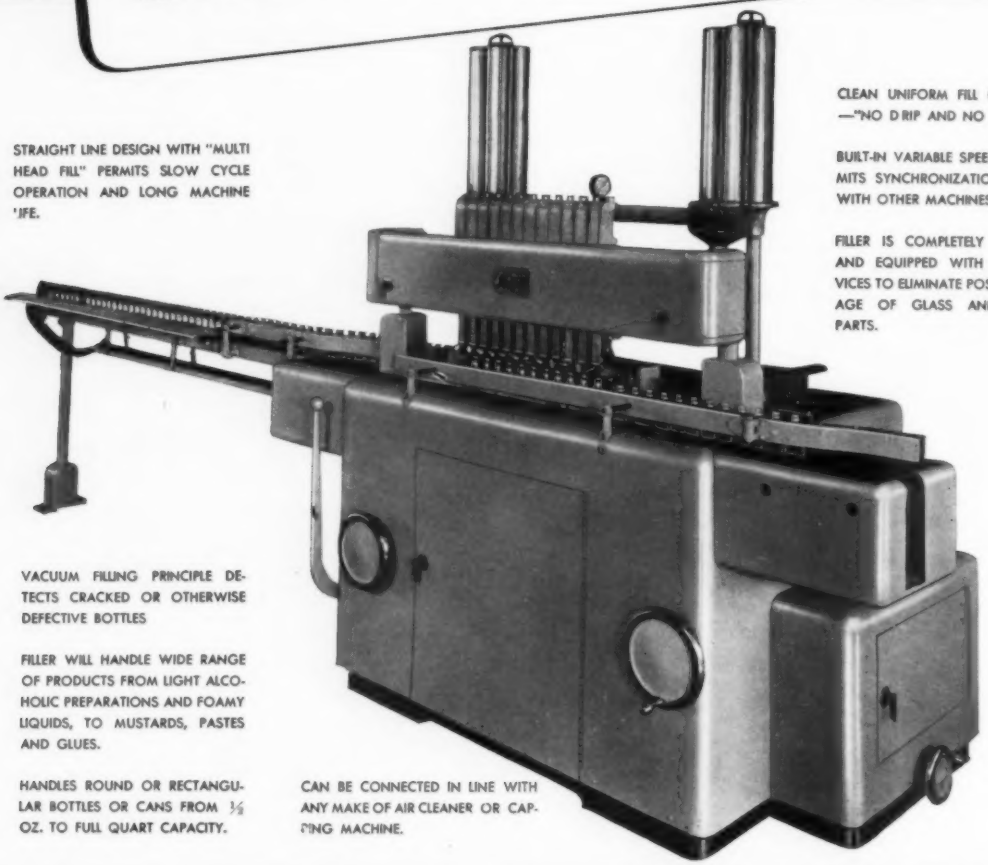
AUTOMATIC SAMCO STRAIGHT LINE FILLER

STRAIGHT LINE DESIGN WITH "MULTI HEAD FILL" PERMITS SLOW CYCLE OPERATION AND LONG MACHINE LIFE.

CLEAN UNIFORM FILL GUARANTEED —"NO DRIP AND NO SPUTTER."

BUILT-IN VARIABLE SPEED DRIVE PERMITS SYNCHRONIZATION OF FILLER WITH OTHER MACHINES IN LINE.

FILLER IS COMPLETELY AUTOMATIC AND EQUIPPED WITH SAFETY DEVICES TO ELIMINATE POSSIBLE BREAKAGE OF GLASS AND MACHINE PARTS.



VACUUM FILLING PRINCIPLE DETECTS CRACKED OR OTHERWISE DEFECTIVE BOTTLES

FILLER WILL HANDLE WIDE RANGE OF PRODUCTS FROM LIGHT ALCOHOLIC PREPARATIONS AND FOAMY LIQUIDS, TO MUSTARDS, PASTES AND GLUES.

HANDLES ROUND OR RECTANGULAR BOTTLES OR CANS FROM ½ OZ. TO FULL QUART CAPACITY.

CAN BE CONNECTED IN LINE WITH ANY MAKE OF AIR CLEANER OR CAPPING MACHINE.

Modern in design and performance, the Automatic Samco is one of Pneumatic's most popular filling machine models. Its many unique features explain why this machine brings you smoother performance and "lower cost per container" operation. For full details on Cleaning, Filling, Capping and Labeling Machinery, write to PNEUMATIC SCALE CORPORATION, LTD., 70 Newport Avenue, North Quincy 71, Massachusetts. Branch Offices: New York, Chicago, Los Angeles, San Francisco.

PNEUMATIC
PACKAGING AND BOTTLING
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For EASY HANDLING and POSITIVE RESULTS

It's an

ALSOP *"Sealed-Disc"* FILTER

Engineered in every detail to provide maximum efficiency on your toughest filtering job. It is completely enclosed and air-tight preventing leakage or evaporation, yet permits quick, easy dismantling for cleaning or changing the filter pads when necessary. Compactness and extreme portability assures convenience and speed in handling batch filtration work in different locations.

For a dependable filtration system with low operating and maintenance cost, use an Alsop *"Sealed-Disc"* Filter. Recommended for drugs, chemicals, perfumes, cosmetic preparations etc. Sizes, with or without pumps, from 1 g.p.m. to many thousands of g.p.h. Our bulletin No. 745 gives complete details, we'll gladly send you a copy.

STAINLESS STEEL *"Sealed-Disc"* FILTERS

"Sealed-Disc" Filters are available in Stainless Steel, Monel Metal or Nickel Plated Brass and Bronze at surprisingly low cost.

ALSOP
ENGINEERING CORPORATION
Filters-Filter Discs & Sheets-Mixers-Agitators
207 Cass Street Milldale, Connecticut

Air-Clean Up To 150 Containers Per Minute

The SANITAIR

D-O-U-B-L-E A-C-T-I-O-N

AUTOMATIC AIR CLEANER

Two complete revolutions of every container for each revolution of the machine provide double cleaning time at normal operating speeds . . . in half the usually needed working space.

Vertical upside-down position of the container at the point of cleaning not only produces the most thorough cleaning action but also insures the most economical use of compressed air. Foreign matter air-forced from containers is collected in easily removable bag.

The Sanitair will clean all size containers from AGST bottles to wide mouth containers . . . requiring only a ten-minute adjustment for change from one container size to another. Containers can be of glass, tin, china or other materials.

Fast cleaning action from comparatively slow moving mechanism insures remarkably smooth-running machinery with exceptionally long wearing life. Our "Sanitair Bulletin" describes all details; write for it today.

OTHER U. S. AIR CLEANERS. The E-Z two-tube Air Cleaner is a simple portable unit. It is automatic except for manual handling of containers. A complete air compressor unit that efficiently cleans up to 40 containers per minute. Write for the "E-Z Bulletin."

U. S. BOTTLERS
Machinery Co.
4013 NORTH ROCKWELL STREET
CHICAGO 18, ILLINOIS

MANUFACTURERS OF
PUMPS
CAPPERS
FILLERS
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WASHERS & DRYERS
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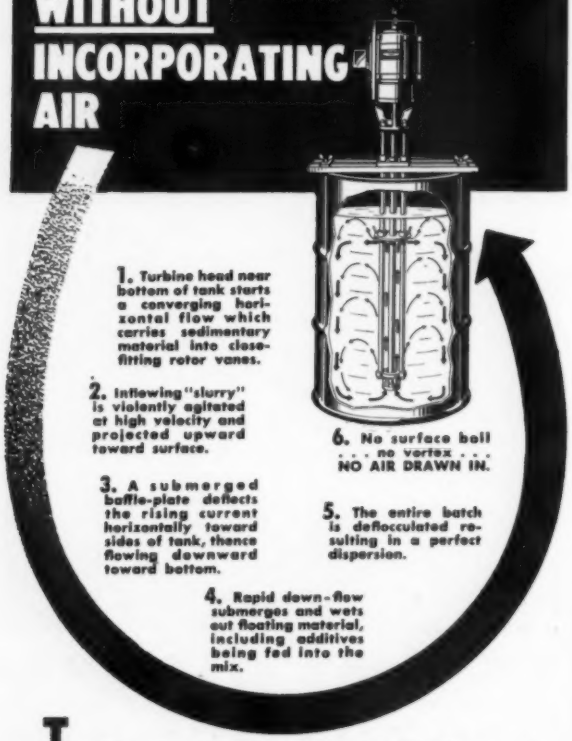
CORKERS
FILLERS

EPPENBACH HOMO-MIXER MAKES DISPERSIONS WITHOUT INCORPORATING AIR


1. Turbine head near bottom of tank starts a converging horizontal flow which carries sedimentary material into close-fitting rotor vanes.
2. Inflowing "slurry" is violently agitated at high velocity and projected upward toward surface.
3. A submerged baffle-plate deflects the rising current horizontally toward sides of tank, thence flowing downward toward bottom.
4. Rapid down-flow submerges and wets out floating material, including additives being fed into the mix.
5. The entire batch is deflocculated resulting in a perfect dispersion.
6. No surface boil . . . no vortex . . . NO AIR DRAWN IN.

The Eppenbach HOMO-MIXER is built on an entirely new principle. Whereas ordinary mixers create a vortex in the material that pulls in air, the HOMO-MIXER draws only from the bottom of the tank. Entrapped air tends to cause separation and splitting, and frequently oxidizes the product.

Furthermore, the HOMO-MIXER does not require a high head of liquid to give efficient mixing action. It is possible to process material in a tank at a depth just great enough to cover the mixing head. Fits tanks of all types and shapes . . . no clamps required . . . no special angle of installation.

Write for complete details of this mixer—"the only one of its kind." Ask for Catalog No. 402.

Eppenbach HOMO-MIXERS are available in a complete range of sizes for laboratories and production plants. Capacities range from 2 to 2,000 gallon batches from ¼ to 25 H. P.

EPPENBACH, INC.
45-10 Vernon Blvd., Long Island City 1, N. Y.

EPPENBACH INC.
Processing Equipment for Over 30 Years

Here's what you'll like about the new

...**"HAGERTY HANDY FILLER"**

- Durable
- Moderately priced
- Eliminates spilling
- Simple to operate
- Convenient sizes
- Light construction

The most practical hand filler for creams, lotions and liquids.

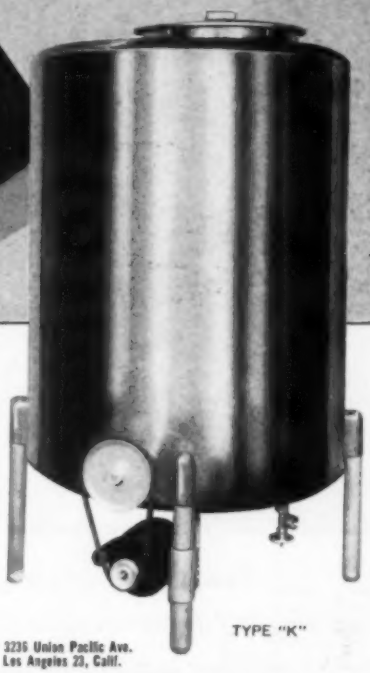
Write for illustrated folder and prices

HAGERTY BROS. & CO.
10 Platt Street New York, N. Y.
Est. 1849

ATTENTION SHIPPING MANAGERS!

Make yourself more valuable...turn out more work with less time and effort: Have a factory-trained D.-B. packing and marking man analyze your shipping room procedure. Profit by his suggestions. Others have. No obligation. See your phone book under "Stencil Cutting Machines." Or write Diagraph-Bradley Dept. C. 3745 Forest Park Blvd., St. Louis 8, Mo.

Your MIXING or STORAGE PROBLEMS can be Solved with a STAINLESS STEEL SAN-I-TANK



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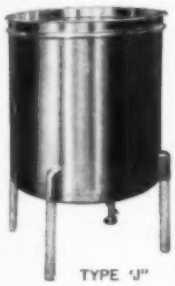

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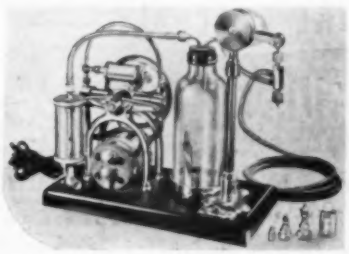

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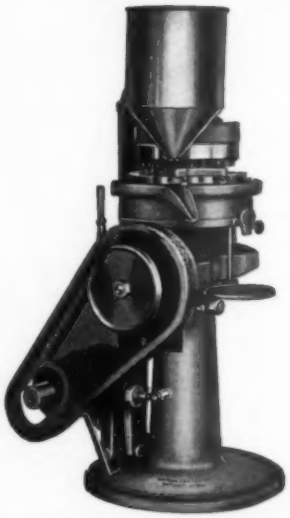

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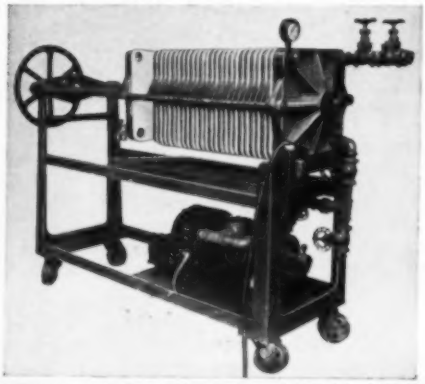

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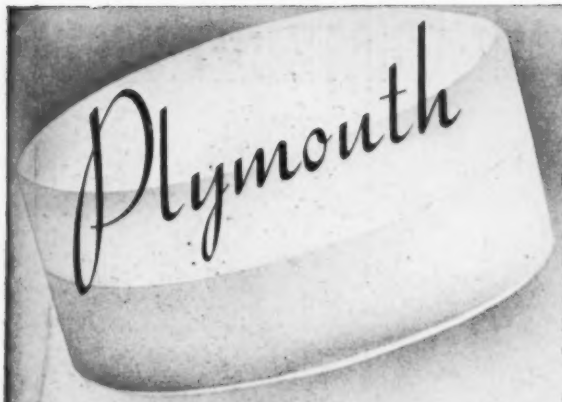

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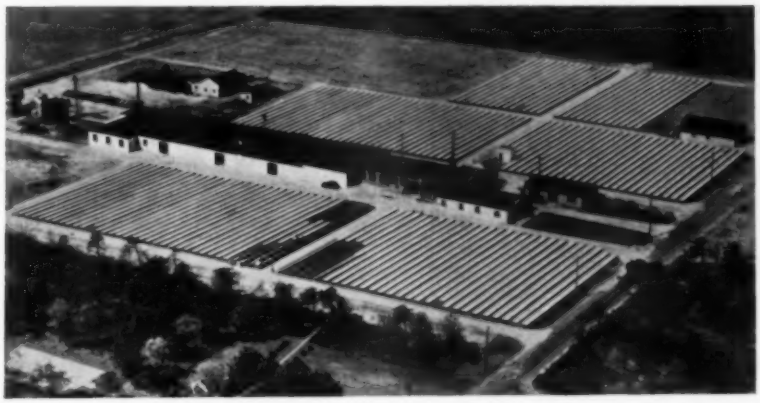

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YOUR TRADE-MARK RECORD

By JOHN H. GRAHAM
International Trade-Mark Consultant

Conflicting Marks Under The Lanham Act

Now that the new Trade-Mark Act of 1946 is in force, we can all sit back and wait for the fireworks. It will be some time before we can see through the smoke for there are many controversial points to be made clear. One of the most interesting of these is the question of conflicting marks and the new definition.

The old definition of confliction under the Trade-Mark Act of 1905, now superseded, was that marks which were genuinely in conflict had to have *both* similarity of substance and similarity of goods. The marks might sound somewhat alike, for example, but if the goods were totally dissimilar, it was usually held that there was no confusion likely to be caused in the mind of the purchasing public.

The modernized definition under the Lanham Act requires *only* similarity of substance, such as resemblance of sound, to create a genuine conflict between trade-marks. This modification is in keeping with recent Court decisions, as are many of the other different provisions of the Lanham Act.

Trend Re Conflicting Goods Confirmed

Early this year Assistant Commissioner Frazer sustained the petition of Primrose House, Inc. to cancel a trademark which included the word "Prim." This mark, owned by the Randolph Drug Co., was used in connection with a deodorant. Primrose House, Inc. had a prior use of the word "Prim." in connection with depilatories.

The one argument advanced by Randolph Drug Co. which interests us here relates to this question of similarity or resemblance of goods. They asserted that confusion in the public mind was impossible since the goods were not of the same descriptive properties. It was held by Mr. Frazer, however, that depilatories and deodorants are unquestionably of the same descriptive properties. He stated that even if neither party deviated from their present sales practices there existed opportunity for confusion, and either might expand or deviate the line of products at will. Further, Mr. Frazer said that it would seem inevitable that a woman who finds herself in possession of a cake of "Prim" deodorant (Randolph Drugs) and a bottle of "Prim" depilatory (Primrose House) would assume that both were produced by the same concern, *regardless of where the purchases were made.*

Test For Possible Conflict Altered!

This underscored part is really important. Up to now one arbitrary test for likely confusion has been "are the goods being sold in the same store over the same counter, or are they in the same department?" Thus, perfumes and water bottles are usually in the same (drug) store and while they might go over the same counter in a small store, certainly they are from different departments. This test will not help too much from now on. Decisions such as that quoted if sustained, coupled with the revised wording of the Act now in force, will make it much more difficult to determine whether there is likelihood of conflict with, for instance, some known registered mark for widely different goods than those with which you desire to use a certain proposed mark.

Which Way Will Decisions Go?

How far the Patent Office and ultimately the Courts will go in enforcing this provision *ad nauseum* to the exclusion of the newcomer in the field can only be seen by their actions.

If they bend over backwards to help the prior registrant, for example, then if you register your mark for perfume you presumably would be safe from the threat of anyone using the same mark for, say, negligees, since some stores have both, and they may even be sold on the same floor.

Thus, one form of defensive marks would not be necessary. I mean those defensive marks which are filed in other classes than your main class to protect your future expansion. If you have a mark for cosmetics, by genuinely using the mark in connection with perhaps compacts, you can register your mark for compacts in class 2. This prevents appropriation by others in other parallel fields of endeavor.

Helpful Trend If Sensibly Applied!

If each case is dealt with in a sane manner and is considered on the real merits, this can be helpful to the *bona fide* manufacturer or distributor who wants nothing but respect from his neighbor.

No yardstick has ever been made to guage conflict or likelihood of confusion between marks. Each case should be fairly considered on its facts with no automatic bias against either party. It is my belief that extent of use in

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commerce and active participation in the trade, including efforts in advertising and promotion, should be given much more consideration when marks are in legal dispute.

Of one thing I am certain. This question of confliction and likelihood of confusion will be one of the most discussed points arising out of the new Act. It should give us some interesting reading.

Foreign Brief-Notes!

Canada—Patent Act Amendments

Amendments to the existing Patent Act have been made. These are now in effect. Mainly, they deal with increased fees to be paid, but include a provision whereby if a joint inventor cannot or will not sign the documents, the other inventor can file the application alone. Printed copies of Canadian Patents will shortly be obtainable for the first time at nominal cost.

Cuba—Pharmaceutical Regulations

New regulations and controls now are in force regarding pharmaceuticals, biologicals and equivalent products. All such products which do not appear in either the Cuban or the U. S. National Formulary or Official Pharmacopoeia are considered original, and must be registered with the Health Authorities. They must not be sold or distributed for sale until registered.

Panama—Trade-Mark Use

It is now necessary to give dates of use in both the home country (i.e., the U. S. A.) and Panama when applying for trade-mark registration.

Singapore—New Trade-Mark Office Opened

The new Colony of Singapore has broken away from Straits Settlements. A Trade-Mark Registry is now open for business. This colony embraces the Island of Singapore, Keeling Islands and Christmas Island.

The Trade-Marks listed here are dated March 18, 1947 through April 8, 1947 inclusive.

OUMA—VI—M—505,471
Assied Touma (A. Touma Mfg. Co.), Plantsville, Conn.
Ser. July 12, 1946 D. U. May 17, 1946

PACKER'S—IV—A—503,215
Packers Tar Soap, Inc., Mystic, Conn.
Ser. June 3, 1946 D. U. Oct. 1, 1877
PACKER'S TAR SOAP—IV—A—503,216
Packers Tar Soap, Inc., Mystic, Conn.
Ser. June 3, 1946 D. U. Oct. 1877
PARFUMS MARNY—VI—BC—502,904
Les Lab. de la Jeunesse, S.A.R.L., Paris, France
Ser. May 28, 1946 D. U. Jan. 1945
PHILOM—VI—M—486,383
The Philom Co., Canton & Akron, Ohio
Ser. July 27, 1945 D. U. Apr. 29, 1945
POMALIN—VI—H—501,105
Frank Aaron (Aaron Beauty Supply Co.) Brooklyn, N. Y.
Ser. Apr. 29, 1946 D. U. Apr. 1, 1937
PRETTY LEGS—VI—D—501,769
Parfait, Inc., Chicago, Ill.
Ser. May 9, 1946 D. U. Apr. 1943
PRINCE'S (with des.)—VI—AM—504,601
Boston Drug & Chem. Co., Boston, Mass.
Ser. June 26, 1946 D. U. June 15, 1945
PRIVILEGE—VI—BC—505,013
Edmond Rosens, Paris, France
Ser. July 2, 1946 D. U. May 31, 1939

RADAR—IV—M—501,987
Johnson Lab., Chicago, Ill.
Ser. May 13, 1946 D. U. Oct. 12, 1943
RAPHAEL (With des.)—VI—BC—503,379
Raphael Lopez (Maison Raphael) Paris, France
Ser. June 6, 1946 D. U. 1936
REJAY—VI—C—496,358
Zitomer Chem. Inc., New York, N. Y.
Ser. Feb. 9, 1946 D. U. Jan. 1932
REMLE (With des.)—VI—CHI—503,834
Imogene Shepherd, Ltd., Chicago, Ill.
Ser. June 13, 1946 D. U. July 7, 1936
REUTER (With des.)—IV—A—484,306
Lanman & Kemp-Barclay & Co., Inc., New York, N. Y.
Ser. June 8, 1945 D. U. Sept. 23, 1924
REVE de PARIS—VI—B—503,334
Tuvache Co., New York, N. Y.
Ser. June 5, 1946 D. U. May 22, 1946
ROLLON—VI—B—497,980
Societe d'Etudes et d'Expansion de la Par. de Luxe, Paris, Fr.
Ser. Mar. 9, 1946 D. U. Nov. 16, 1945

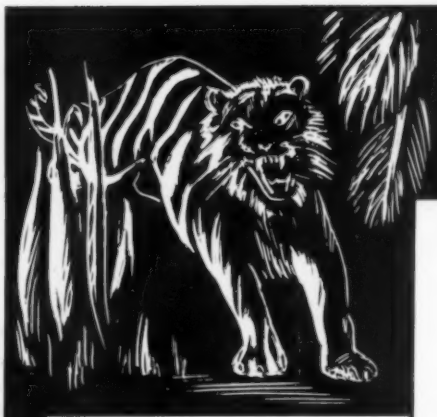
SAILORS-DELIGHT—VI—C—650,505
Botany Worsted Mills, Passaic, N. J.
Ser. July 30, 1946 D. U. June 21, 1946
SALVACILLIN—VI—M—495,720
Barron Chem. Co., New York, N. Y.
Ser. Jan. 31, 1946 D. U. Jan. 4, 1946
SCHIEFFELIN—VI—CM—485,655
Schieffelin & Co., New York, N. Y.
Ser. July 10, 1945 D. U. Apr. 10, 1923
SHASTA—VI—A—501,530
The Procter & Gamble Co., Cincinnati, Ohio
Ser. May 6, 1946 D. U. Feb. 19, 1946
SILLAGE—VI—B—505,699
Guerlain, Inc., New York, N. Y.
Ser. July 18, 1946 D. U. 1910
SNUDS—(With des.)—IV—A—501,738
Help, Inc., Chicago, Ill.
Ser. May 9, 1946 D. U. Sept. 1942
SPIRALE—VI—B—505,689
Etablissements Rigaud Inc., New York, N. Y.
Ser. July 16, 1946 D. U. June 14, 1946
SQUIBB—(With des.)—VI—M—497,747
E. R. Squibb & Sons, New York, N. Y.
Ser. Mar. 6, 1946 D. U. Apr. 13, 1938
STAON LIP BEAUTIFIER—VI—C—496,555
Philip A. Guerrieri, Chicago, Ill.
Ser. Feb. 14, 1946 D. U. Dec. 8, 1945
STAPHENE—VI—T—480,682
Vestal Chem. Co., St. Louis, Mo.
Ser. Mar. 8, 1945 D. U. Aug. 24, 1938
SUMMER WOODS—VI—BC—478,727
Weleda, Inc., New York, N. Y.
Ser. Jan. 17, 1945 D. U. Oct. 1944
SUN BIRD—(With Des.)—VI—C—505,171
Affiliated Prod. Inc., New York, N. Y.
Ser. July 8, 1946 D. U. Apr. 16, 1946
SWEDISH WHITE CARNATION—VI—ABC—496,740
Reta Terrell, Chicago, Ill.
Ser. Feb. 16, 1946 D. U. Oct. 1929

TICKLED-PINK—VI—C—506,507
Botany Worsted Mills, Passaic, N. J.
Ser. July 30, 1946 D. U. June 21, 1946
TICO—VI—M—502,264
Albert N. Brooks (Brooks Co.) Minneapolis, Minn.
Ser. May 17, 1946 D. U. Apr. 18, 1946
TIS-SAY—IV—M—496,307
Albert T. Green & Co., New York, N. Y.
Ser. Feb. 9, 1946 D. U. Jan. 1, 1946
TONI—VI—H—501,453
Morris Herman (Toni Herman Co.) Brooklyn, N. Y.
Ser. May 4, 1946 D. U. May 1944
TRIOX—IV—A—491,306
American Industrial Co., Inc., Indianapolis, Ind.
Ser. Nov. 9, 1945 D. U. Apr. 1, 1944
TRIX—VI—T—504,971
Geigy Co., Inc., New York, N. Y.
Ser. July 2, 1946 D. U. May 29, 1946

UNAPAK—VI—K—504,631
Phillips Pharma. Prod. Inc., Darien, Conn.
Ser. June 26, 1946 D. U. May 7, 1946

VIRILITONE—VI—CHI—507,080
Skin Research Lab. New York, N. Y.
Ser. Aug. 8, 1946 D. U. June 1, 1946
VISHNU—VI—C—500,587
The Vishnu Corp., Cleveland, Ohio
Ser. Apr. 10, 1946 D. U. Mar. 1, 1942

(To be continued)



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(CRUDE, POWDERED)

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GUM ARABIC BLEACHED
GUM GHATTI
GUM KARAYA (Indian)
GUM TRAGACANTH
GUM EGYPTIAN
GUM LOCUST (Carob Flour)
QUINCE SEED

★

CASEIN

SPECIALTIES:

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★

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★

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EGG YOLK
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Patent Thoughts and Trends

By THOMAS CIFELLI, Jr., Patent Attorney

The Double Standard in Patents

Many of us are guilty of having a double standard as far as our attitudes towards patents are concerned. It is quite probable that we don't realize this and it is certain that we don't mean or intend to be that way, but the fact remains that we often are. For example, a given patent is hotly defended as being valid, etc. or just as hotly attacked as being invalid, etc.—depending on whether you are on the patent owner's side or on the other side, i.e., you would like to do something which but for the patent you you could do without risk of infringement.

Of course, there are cases where there is room for honest differences of opinion as to whether the patent in question is valid or has been infringed. The present remarks are not directed to situations involving such patents. Instead, we are now referring to the numerous instances where,almost before the facts are even examined, people have made up their minds, one way or the other.

A pretty good illustration of what I have in mind came to my knowledge recently. It seems that A had made what appeared to be a patentable invention and a patent application was filed in due course. The Patent Office Examiner's search unearthed a patent which had been issued a few years before A's application was filed. A was asked to comment on the patent and to point out all the diffierences between the teachings of the patent and those of his invention. A's comments were to the general effect that the Examiner couldn't possibly be a chemist, otherwise he would know that the patent had nothing to do with A's invention, which any chemist would quickly admit was a real scientific contribution. Also thrown in was the not-so gentle hint that the patent attorney apparently didn't know his business either. Finally, after some effort, A did supply a list, a long one, showing many alleged points of distinction. Unfortunately, when considered objectively the cited patent taught exactly what A had claimed to have invented and the application had to be abandoned.

The story doesn't end here, because there remained the little question of whether or not A's employer had the right to use the invention covered by the cited patent. Since there was no question about A's process infringing that of the patent all possible attacks on its validity were considered. A's contribution to this study was a very lengthy and heated tirade on the patent system in general, and the Patent Office Examiner and patentee of the offending patent, in particular. The theme of A's new position was that any chemist, even a first year organic chemistry student, could have made the invention, and therefore no patent should ever have been granted.

The man who was chiefly responsible for Donald Nelson being employed at Sears once told the writer that the most significant thing about Nelson was that he never voiced an opinion until he had all the facts, and the opinion was always based solely on the facts, regardless of subjective considerations.

How many of us can say we are just as objective as to patents or must we admit to ourselves if to no one else that our views are influenced, if not entirely dictated, by whether the patent in question is ours or the other fellow's?

Improving Taste and Odors of Materials

The taste and odor of materials are often of controlling importance. Two recent patents have in common suggested solutions to taste and odor problems, though they differ as regards the materials treated and the methods used.

U. S. 2,419,137 (assigned to Du Pont) is concerned with avoiding foreign odor and taste in hydroxy acetic acid and its esters, glycolides, tartaric acid and its esters, citric acid and the like. According to Hetherington, the inventor, even when such materials are processed or stored in so-called stainless steels they acquire foreign odor and taste. This can be avoided, the patent says, if the processing and storage is conducted in the presence of polyvalent metals, such as manganese, bismuth, cobalt, iron, or especially, copper.

U. S. 2,420,238 is concerned with the stabilization of fat-type food compositions against deleterious oxidative changes. This patent, assigned to Wyeth, attacks the problem by incorporating into compositions such as milk, butter, bacon, a small amount of a "synergistic antioxygenic combination" of certain organic antioxidants and a crude source of vitamin B complex containing at least potentially an antioxygenic substance.

Examples of organic antioxidants include sulfhydryl compounds, phenylene diamine, diphenylamine and the monobenzyl ether of hydroquinone. Aqueous alcoholic rice bran concentrate is a preferred source of the vitamin B complex.

Preferably, amounts from about 2 to 10% of the combination are used. The organic antioxidants are employed in amounts of the order of 0.01 to 0.5%, depending on the specific antioxidant.

In addition to the treated compositions already noted the following might also be mentioned: oils such as coconut, castor and olive, ice cream, mayonnaise, essential oils such as lemon, orange, peppermint, wintergreen, cloves, sassafras, and creams of the vanishing, cold, shaving, and depilatory types.

Marihuana Active Compounds

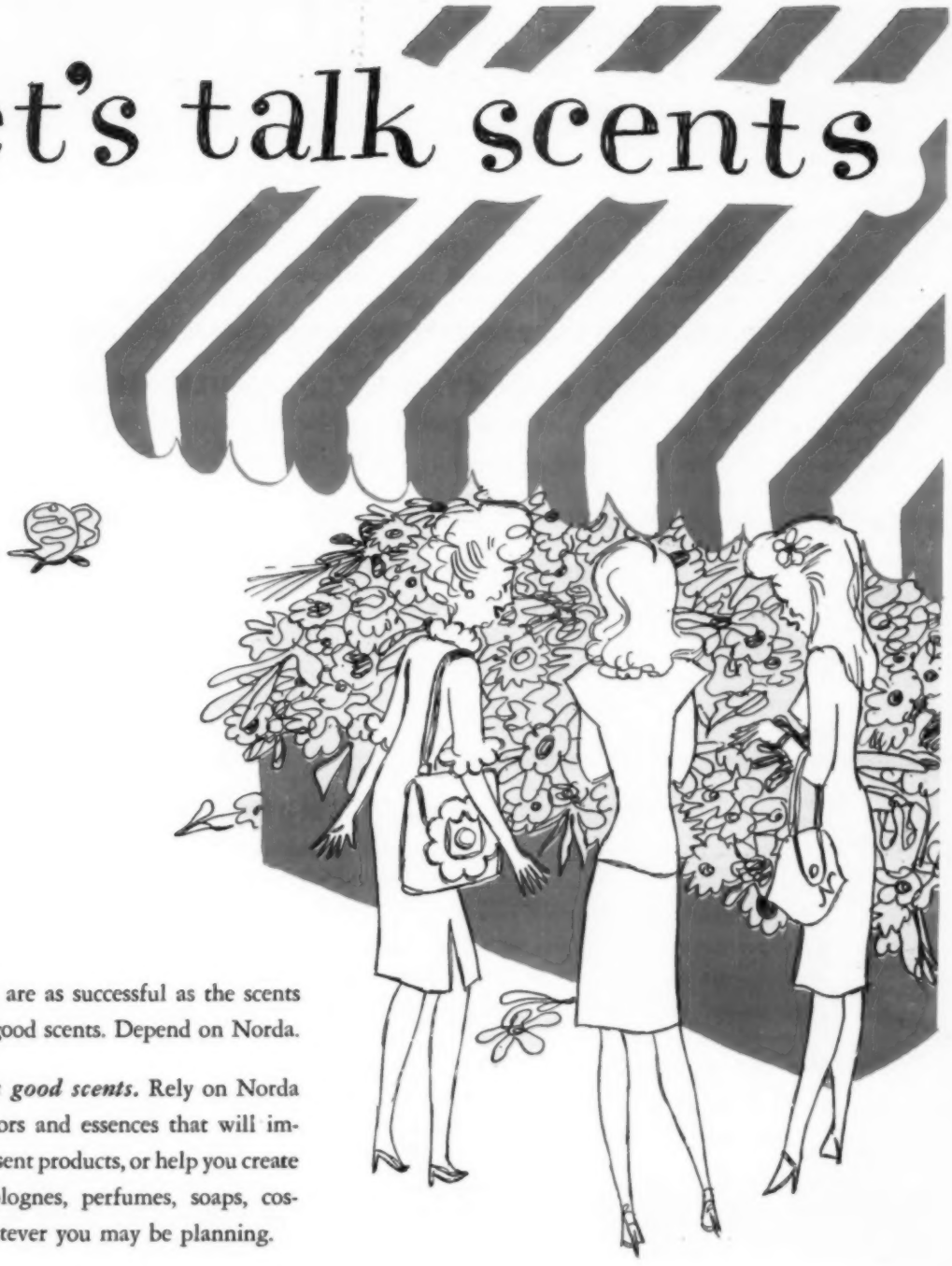
Roger Adams, the famous U. of Illinois professor and former president of the American Chemical Society just obtained four patents on materials found to possess marihuana activity. The materials are dibenzopyran compounds.

U. S. 2,419,934 relates to optically-active tetrahydro-dibenzopyrans, prepared by treating pulegone with a 1, 3-dihydroxy-5-alkyl benzene.

U. S. 2,419,935 involves compounds prepared by condensing a cyclohexanone-2-carboxylate (such as ethyl cyclohexanone-2-carboxylate) with a 1, 3-dihydroxy-5-alkyl benzene of which 5-methyl-(orcinol) and 5-n-amyl-(olivetol) are typical examples. The resulting dibenzopyrone is then reacted with a Grignard reagent to form the desired dibenzopyran.

U. S. 2,419,936 covers tetra-hydro

Let's talk scents



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cannabinol, made by isomerizing cannabadiol with reagents such as p-toluenesulfonic acid, sulfuric acid, hydrochloric acid and ethanol, hydrogen chloride in ether, among others. The starting material, cannabadiol, is obtained from red oil, an extract of hemp (Cannabis sativa or Cannabis indica) and is itself physiologically inactive so far as marihuana activity is concerned.

U. S. 2,419,937 embraces hexahydrocannabinol and various homologues thereof. They are derived from three different sources—first, from red oil by the precipitation of cannabidiol and its subsequent isomerization to tetrahydrocannabinol and hydrogenation to the hexahydro compound—second, by a synthesis beginning with a cyclohexanone carboxylate—and third, by a synthesis beginning with pulegone.

Thymol and Menthol

No reader of this publication needs to be reminded of the importance of thymol and menthol as pharmaceutical and perfume chemicals. Therefore, anything which appears to be novel by way of processes for the preparation of these chemicals would seem to be of interest. For this reason U. S. 2,419,093, issued to two Du Pont inventors, Signaigo and Sly, seems to warrant special consideration.

The patent covers a catalytic process for converting the carboxyl group to a methyl group in compounds such as 3-hydroxycuminic acid or esters thereof. Menthol can be obtained in one step, the conversion of the carboxyl to the methyl group being accompanied by the hydrogenation of the aromatic nucleus.

The process for attaining the desired conversion involves catalytic hydrogenation at a temperature within the range of about 200°C. to about 400°C., under a hydrogen pressure of at least 1000 pounds per square inch, in the presence of a chromite of a hydrogenating metal or a metallic copper hydrogenation catalyst.

This patent appears to involve an extension of the basic Lazier process for hydrogenating higher fatty acids and esters, the catalyst and general conditions of the reaction being comparable.

N-Acylthiomethylamides

Burke, a Du Pont inventor, received U. S. 2,418,497 dealing with what the inventor says is a new class of compounds, useful as pharmaceuticals.

The new compounds are made by reacting a monobasic carbothiolic acid (such as thiolacetic with an N-alkoxymethylcarbonamide such as N, N'-bis (methoxymethyl) urea. The condensation product of the foregoing specific reactants when dissolved in aqueous alkali and brought to a pH of 5 to 8 by addition of acetic acid is said to have the property of reducing the disulfide linkages of wool or other keratinous materials.

Other Patents

U. S. 2,417,992—(Niederl et al)—**N, N-dialkyl morpholinium alkyl sulfates. Disinfectants.**

U. S. 2,418,033—(Miles Labs.)—**Diagnostic compositions.**

U. S. 2,418,077—(Monsanto)—**1, 2-disubstituted-4, 5-dihydro-imidazoles. Therapeutic agents and insecticides.**

U. S. 2,418,115—(E. A. H. Friedheim)—**Organo metallic compounds containing 1, 3, 5-triazine rings.**

U. S. 2,418,181—(Parke, Davis)—**Steroidal hormone intermediates. 20-keto-pregnens having at C_3, C_6 and C_{20}, keto groups or groups capable of hydrolysis to keto groups. Related cases are S.N. 317,419, S. N. 393,667, 393,668 (U. S. 2,291,643, and S. N. 317,419.**

U. S. 2,418,289—(Hoffmann-La Roche)—**Alpha: Alpha - bis - (beta'-halogenalkyl)-arylacetonitriles preparation.**

U. S. 2,418,296—(S. S. Frederickson)—**Medicated cigarette. Contains high melting animal fat.**

U. S. 2,418,499—(Du Pont)—**2-Alkoxymethyl-Mercapto-Thiazoles and Thiazolines. Pesticides.**

U. S. 2,418,501—(E. R. Squibb)—**Amino alcohol esters of oxybenzoic acids and acid addition salts, such as the hydrochloride of beta-[N-ethyl-N-(beta-hydroxyethyl)-amino]-ethyl p-ethoxy-benzoate. Local anesthetics.**

U. S. 2,418,548—(Imperial Chemical)—**4 - Amino - 5 - arylpyrimidine. Antibacterial agents.**

U. S. 2,418,603—(Schering)—**Estrogenically powerful estradiol is made from equilin, dihydro-equilin and their substitution products.**

U. S. 2,418,902—(Am. Cyanamid)—**Pantothenic acid is made by fusing alpha-hydroxy-beta, beta-dimethyl-gamma-butyrolactone with beta-alanine.**

U. S. 2,418,923—(Am. Cyanamid)—**5-keto-2,4,6,8-tetrahydroimidazolo-(4, 5-C) thiophenes. Intermediates for pharmaceuticals, such as biotin.**

U. S. 2,418,925—(Am. Cyanamid)—**New bacteriostatic agents: ureylene carbocylic fatty acids, salts and esters, e.g., gamma-(3, 4-ureylene-phenyl) butyric acid.**

U. S. 2,418,952—(E. A. Poillon)—**Toilet powder shaker and dispersing container.**

U. S. 2,419,011—(Allied Chem. and Dye)—**Recovery of chrysene.**

U. S. 2,419,199—(Parke, Davis)—**Quinolines, such as 4-(2'-diethylamino - ethyl - anilino) - 7 - chloroquinoline dihydrochloride. To xic to protoza, particularly plasmodia.**

U. S. 2,419,200—(Parke, Davis)—**Acridines, such as 2-methoxy-6-chloro-9-(4'-diethylaminomethylanilino)-acridine dihydrochloride. Also toxic to plasmodia. Cf. preceding item.**

U. S. 2,419,220—(Research Corp.)—**3-hydroxy cholanic acid derivatives. Adrenal cortex hormone intermediates.**

U. S. 2,419,230—(S. I. Ruskin)—**Sulfa compounds rendered less toxic, more soluble and less irritating on the tissues, by combining them with cevitamic or ascorbic acid.**

U. S. 2,419,348—(E. A. H. Friedheim)—**Arsenic compounds of phenyl-hydrazo-naphthol sulfonic acids. Have therapeutic effect in diseases caused by certain spirochetes and protozoa.**

U. S. 2,419,366—(Am. Cyanamid)—**Hypnotics and Sedatives. (N'-alkyl-piperazino)-alkanol esters.**

U. S. 2,419,516—(Reed and Carnrick)—**Dialkyl-dihydroxy-diphenyl-hexadienes, hydrogenation and esterification derivatives. Estrogens. Claim covers 3:4-bis-(3-methyl-4-hydroxyphenyl)-2:4-hexadiene.**

U. S. 2,419,530—(Dow)—**Hydantoin production.**

U. S. 2,419,777—(M. D. Howe)—**Hair straigthening and drying device.**

U. S. 2,419,831—(P. W. Garbo)—**Amidization of pyridine mono-carboxylic acids.**

U. S. 2,419,865—(Abbott Labs.)—**Carboalkoxylation of phenyl acetate.**

U. S. 2,420,210—(Merck)—**3, 4-dimethyl-N-tetraacyl-ribonyl aniline.**

U. S. 2,420,434—(Monsanto)—**2-Amino-5-Alkenyl—1, 3, 4—Thiadiazoles. Analgesics.**

U. S. 2,420,641—(Winthrop)—**dl-Histidine preparation.**

U. S. 2,420,703—**Mead Johnson)—2-Sulfanilamidopyrazine.**

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Nomenclature: bis (5-chloro-2-hydroxyphenyl) methane; Dihydroxydichlorodiphenylmethane.

Melting point: 172 to 175° C.

Color: White to slightly pink.

Odor: Faintly phenolic.

Bactericidal properties:

F. D. A. phenol coefficient 90 at 37.5° C. against Staphylococcus aureus.

F. D. A. phenol coefficient 110 at 20.0° C. against Eberthella typhosa.

A. O. A. C. phenol coefficient 50 at 20.0° C. against Trichophyton interdigitale.

Solubility: Soluble in alcohols, ketones, propylene glycol, vegetable oils, fixed alkalies. Insoluble in water.

Toxicity: Non-toxic and non-irritating.

Suggested uses: Compound G-4 can be used as the active ingredient in athlete's foot preparations, including powders, lotions and ointments, and in veterinary remedies for the treatment of ringworm infections; it can be utilized as a topical antiseptic for superficial wounds and in such cosmetic products as deodorant colognes and powders; and as a fungicide, it will prevent mold growth and act as a preservative in hair wave sets, lotions, cold creams, ointments and many other cosmetics.

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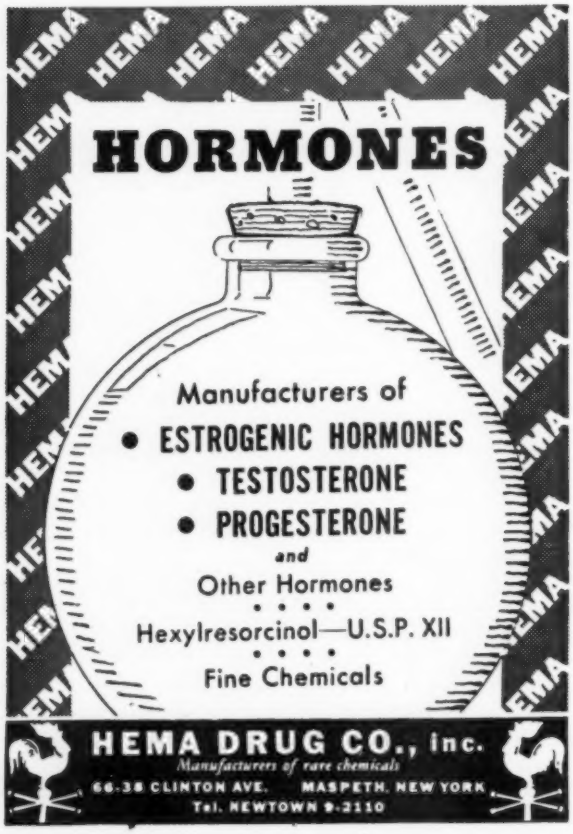

Industry's Books

Methods of Vitamin Assay, Prepared and edited by The Association of Vitamin Chemists, Inc., 189 pp., Interscience Publishers, Inc., New York, $3.50.

The purpose of this volume is to promote and implement the standardization of vitamin methods and to coordinate the widely scattered literature and reports of personal experiences. It presents those procedures which—selected according to their usefulness, precision, and general applicability—will assure optimal results under the most divergent conditions of laboratory practice. All those who carry out vitamin analyses and assays will appreciate the detail in which each method is described, the extensive supplementary notes, the alternative procedures given, the complete listing of apparatus, and the references to the original literature.

Natural Perfume Materials—A Study of Concretes, Resinoids, Floral Oils and Pomades, by Y. R. Naves and G. Mazuyer, Rheinhold Publishing Corporation, New York, 1947.

The manufacture of natural flower oils has always been a closely guarded and almost exclusively French industry, and only a few outsiders have succeeded in penetrating its mysteries. Aside from the inner circle of the French perfumers there are not many, indeed, who have had an opportunity regularly to visit Grasse—the center of the industry—or actually to work in any of the flower oil extraction plants there. The production of such oils is, moreover, a highly technical industry, requiring a profound knowledge of agriculture, methods of extraction and chemistry. An occasional visit to Grasse, therefore, has resulted in little real understanding of the processes involved in this fascinating and important branch of the essential oil industry. Literature on the subject has been spotty, scattered, unreliable, even self-contradictory; frequently one writer has simply copied the errors of others.

It is, therefore, with the greatest satisfaction that this writer welcomes a reliable, comprehensive and modern study, which describes in some detail most of the important phases of the history, manufacture, analysis and evaluation of natural flower oils and resinoids. A book of only 300 pages cannot be expected to cover the whole field of essential oils; it must in some sense be restricted. Dr. Y. R. Naves and the late G. Mazuyer—two of the most competent authorities on this topic—have therefore limited the scope of their work to the natural flower oils and resinoids.

Dr. Naves was for many years Director of the Research Laboratories of Etablissements Antoine Chiris, in Grasse, and is an outstanding figure in the science of essential oils. The present work first appeared, in French, in 1939; it has only recently been translated by Mr. Edward Sagarin of Givaudan-Delawanna, Inc. In the preparation of the English translation, Mr. Sagarin has been most painstaking and accurate, and has checked hundreds of bibliographical references carefully.

The book is well designed and easy on the eyes—no small thing in its favor! It should be of great help to American and English perfumers, who will find it a most valuable guide through the intricacies of a highly specialized industry.

Dr. Ernest Guenther,
Fritzsche Brothers, Inc.

The Pharmacopoeia of the United States of America, Thirteenth Revision, by Authority of the United States Pharmacopoeial Convention, Official from April 1, 1947, 957 pp., distributed by Mack Publishing Co., Easton, $8.

This revision of the United States Pharmacopoeia reflects a period of intensive medical development supported by scientific research of a high order and stimulated by the demands of a global war. The scope policy established in 1820 for the first United States Pharmacopoeia has been meticulously maintained and an effort made to restrict the admissions to the Thirteenth Revision to those therapeutically active agents, germicides, anesthetics, diagnostic agents, and to her necessary medical aids, which reflect the best state of medical knowledge of today, and to the preparations of these whereby they may be most efficiently administered or used. Substances required for the manufacture of preparations are also included and standardized. For the first time in the U. S. Pharmacopoeia the English titles occupy the leading position and determine the alphabetical arrangement of monographs. Latin titles are, of course, retained. With the basic therapeutic agents now arranged in alphabetical order, it is possible to follow each drug with its preparation and it is, therefore, unnecessary to list dosage forms in a special paragraph under the respective drugs. The above stated price of the U. S. P. XIII will entitle the owner to a copy of a Bound Supplement, should such a Supplement eventually become necessary.

Marketing Drugs And Cosmetics, by Louis Bader, Ph.D., Associate Professor of Marketing, New York University, and Sidney Picker, M.C.S., President, Namerc Inc., and Natalie Louise, Inc., New York, 342 pp., D. Van Nostrand Co., New York, $5.

The purpose of this volume is to set forth the basic principles underlying the marketing of drugs and cosmetics and to answer many of the problems continually arising in these operations. Although it is true that certain companies have been highly successful, there have been many commercial failures brought about by a lack of understanding of the fundamentals of sound business practice. This book has been written for the prospective manufacturer who will encounter marketing problems, for the drug store proprietor, for the junior executive who is seeking an overall picture of marketing, for the advertising man who is handling drug or cosmetic accounts and seeking answers to merchandising problems, and also for the student in organized courses in marketing and merchandising. At the outset, there is a discussion of "What and where is my market?" followed by an analysis of the type of product to be marketed. Practices in the industry are described, particularly drug store problems. The many ramifications of product packaging, selling to dealers, market plans and organizations, and displays are explained and coordinated. Special attention is given to the export market. Also, there are separate chapters on price legislation and government regulation.

Compounder's Corner

Honey as Dispersing Agent for Peru Balsam

According to I. W. Rose (*Carolina J. Pharm.* 12:415, 1946), honey serves as a useful dispersing agent for compounding preparations containing balsam of Peru. Honey seems to be a desirable addition to such substances as castor oil, soap and petroxolin, used as an aid in the preparation of ointments containing balsam of Peru. Balsam of Peru mixes readily with honey and a mixture of 1 part of the balsam with 0.5 to 1 part of honey may be incorporated into any of the ordinary ointment vehicles such as petrolatum, wool fat and yellow or white ointment. Ointments of good consistency and appearance may be obtained with each of these bases. The addition of a small amount of honey also aids in the suspension of resinous material dispensed in aqueous liquids.

Face Lotions

Facial lotions, notes F. Winter. (S. P. C. *20: 359, 1947*), *fulfil a very important function in the daily care of the skin. Their chief role is to clean and facilitate the removal of the accumulated impurities from the skin's surface. This detergent action also carries with it a tonic effect, stimulating the cutaneous tissue. This is usually due, apart from specific additions, to the weak alcohol content.*

Informed modern opinion implies disapproval of alkaline lotions for care of the face. Mildly acidic lotions are preferred because they assist in maintaining the normal protective acid layer. Properly constituted, they exert a good tonic action and may, in addition, possess germicidal and other properties. The detergent action of acid lotions ought not to be too accentuated. The recommended alcohol concentration varies from 30 per cent, with 50 per cent as the maximum.

A number of formulas for facial lotions are listed by Winter, of which the following are typical examples:

Boric Acid Cleansing Lotion

Boric acid	25.0 Gm.
Lactic acid	5.0 "
Alcohol	560.0 "
Water	540.0 "

Applied by means of a wad of cotton and well rubbed into the skin, this alcoholic lotion removes grease and is a very effective skin cleaner.

Astringent Camphor Lotion

Camphor	2.5 Gm.
Menthol	2-2.5 "
Boric acid	27.0 "
Citric acid	3.0 "
Alum	9.0 "
Alcohol	300.0 cc.
Water	700.0 "

This may be tinted pale rose with a suitable water-soluble dye.

Astringent Boric Lotion

Boric acid	2.0 Gm.
Alum	2.0 "
Citric acid	0.3 "
Menthol	0.1 "
Alcohol	35.0 cc.
Water	60.0 "

Camphorated Lotion

Camphor	5.0 Gm.
Alcohol	25.0 cc.
Dissolve then add:	
Hot water	1000.0 "

Boric-Lemon Lotion

Preserved lemon juice	70.0 Gm.
Citric acid	2.0 "
Boric acid	2.0 "
Alcohol	60.0 cc.
Water	70.0 "
Lemon perfume	sufficient

The preserved lemon juice is made by adding 0.3 Gm. of para-hydroxybenzoic acid ester dissolved in 2cc. alcohol to 130 cc. of lemon juice and then filtering.

Camphorated Witchhazel Lotion

Liquor Hamamelis	60.0 Gm.
Camphorated alcohol (10%)	15.00 cc.
Citric acid	1.0 Gm.
Alcohol	30.0 cc.

Toilet Vinegar

Glacial acetic acid	1.5 Gm.
Menthol	0.1 "
Alcohol	30.0 cc.
Water	70.0 Gm.

Special astringent lotions, intended for occasional use only, may be slightly more drastic in action than the more frequently applied skin tonics. Illustrative examples are as follows:

1.

Alum	2.0 Gm.
Water	60.0 "
Alcohol	20.0 cc.

2.

Lactic acid (75%)	2.0 Gm.
Boric acid	2.0 Gm.
Alum	1.0 "
Camphor	0.1 "
Water	80.0 "
Alcohol	20.0 cc.

3.

Boric acid	3.0 Gm.
Alum	1.0 "
Citric acid	0.5 "
Camphor	0.2 "
Menthol	0.2 "
Alcohol	20.0 cc.
Water	80.0 Gm.

Pepsin lotions, says Winter, are decongestive, skin refining lotions par excellance. Applied in the form of wet compresses, or dabbed on with cotton, they digest and dissolve accumulations of kerato-albuminous matter such as comedones (blackheads and whiteheads). They frequently exert a remarkable action in clarifying the skin and giving it a clean, fresh and almost new appearance. Two typical pepsin lotions are given below:

1.

Pepsin	1.0 Gm.
Boric acid	2.0 "
Water	97.0 "

2.

Pepsin	1.0 "
Alum	2.0 "
Lactic acid	1.0 "
Boric acid	1.0 "
Water	95.0 "

Liquid Cream Shampoo

To make a liquid cream shampoo, it is suggested in the *Journal of the American Pharmaceutical Association*, Practical Pharmacy Edition (8:211,1947) that there be prepared an emulsion of cetyl alcohol or stearyl alcohol with sodium lauryl sulfate, then add a sufficient amount of additional water and sodium lauryl sulfate to produce the desired sudsing point and concentration.

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The following formula illustrates the procedure:

Cetyl alcohol	**15 Gm.**
Propylene glycol	**10 "**
Beeswax	**2 "**
Sodium lauryl sulfate	**2 "**
Water to make	**100 cc.**

Melt the fats and the propylene glycol and bring to 65° C. Dissolve the sodium lauryl sulfate in the water and bring to 65° C. Under rapid agitation add the water to the fats. When the emulsion is complete add 50 Gm. more of sodium lauryl sulfate dissolved in enough water to bring the total volume to 500 cc.

Buffer Systems for Ophthalmic Solutions

For some time there has been confusion concerning the selection of proper buffer systems and p H levels for the preparation of solutions of ophthalmic drugs. To clarify the situation, H. W. Hind and F. M. Goyan (J.A.Ph.A., Scient. Ed. 36:33, 1947) listed the various buffer systems and made an analysis of their usefulness as pharmaceutical buffers. They also made a thorough study to determine the optimal p H level at which solutions of the more common ophthalmic drugs should be buffered in order to assume maximum stability and therapeutic efficiency. Such drugs have been assigned to five groups according to the hydrogen ion at which they are best buffered. It is recommended that the various solutions be prepared as stock vehicles. The opthalmic preparation is dispensed by weighing out the specified amount of active ingredient and dissolving in the suggested vehicle for the particular drug.

Group 1 includes those drugs best dispensed in a weak acid solution, e.g. pH 5. At this p H level they show suitable stability, and satisfactory therapeutic properties such as prompt action with minimum irritation to the eye tissue. The drugs of Group 1 comprise the salts of:

Adrenalin	**Phenacaine**
Cocaine	**Pontocaine**
Dionin	**Procaine**
Metycaine	**Prostigmine**
Nupercaine	**Syntropan**
Optochin	**Zinc**

The solution for dispensing these drugs is as follows:

Boric Acid, c.p.	**0.356 M**
Alkyl dimethyl benzyl ammonium chloride	**1-50,000**
Distilled Water	**q. s.**

Group 2 includes those ophthalmic which are best dispensed in a phosphate buffer at a p H of 6.8. It was found that the loss in activity of these drugs after thirty days was only 10 to 20 per cent, which is considered permissible. Included in Group 2 are the salts of:

Atropine	**Homatropine**
Ephedrine	**Pilocarpine**
Eucatropine	

The buffer solution for Group 2 drugs is as follows:

Sodium Acid Phosphate (NaH_2PO_4), anhydrous	**4.003 Gm.**
Disodium Phosphate (NaH_2PO_4), anhydrous	**4.73 Gm.**
Sodium Chloride, c.p.	**4.30 Gm.**
Alkyl dimethyl benzyl ammonium chloride	**1-50,000**
Distilled Water, q. s.	**1000 cc.**

Eserine preparations comprise Group 3. Solutions of eserine salicylate decompose readily by hydrolysis and oxidation. The rate of decomposition varies according to temperature, p H, and exposure to light. After consideration of the factors involved, Hind and Goyan recommended the following vehicle for preparing eserine solutions:

Boric Acid, c.p.	**0.357 M**
Sodium Metabisulfite	**0.1%**
Alkyl Dimethyl Benzyl Ammonium Chloride	**1-50,000**
Distilled Water	**q. s.**

Sulfa drugs are classed in Group 4. Five per cent solutions of the sodium salts of sulfathiazole and sulfadiazine vary in alkalinity from p H 9 to 10 and the critical point before precipitation of the free sulfonic acid is around 8.2. The excess alkalinity of these solutions can be reduced to a minimum by the use of a borate buffer of very low buffer capacity. This is accomplished by the simple dilution of the Palitzsch Borate Buffer (13) at a p H 8.6. The following formula is recommended for dispensing the sodium salts of sulfathiazole and sulfadiazine:

Modified Palitzsch Borate Buffer, pH 8.6	**200 cc.**
Alkyl Dimethyl Benzyl Ammonium Chloride.	**1-50,000**
Distilled Water, q. s.	**1000 cc.**

Penicillin comprises the last group. The instability of penicillin in aqueous solutions is generally known, but beyond this there is little information available as to the stability of such solutions at different p H levels and at different temperatures. However, Hind and Goyan have found that penicillin may be successfully prepared for opthalmic use in a concentration of 1000 units per cc. in a phosphate buffer of p H 6.5. When stored in a refrigerator, at 10° C, such solutions showed no significant loss of potency at the end of a period of thirty days. The following solution was recommended:

Phosphate Buffer (Sorensen) pH 6.47	**100cc.**
Sodium Chloride	**0.5 Gm.**
Penicillin Sod. 100,000 Oxford Units	

Methods for preparing the Palitzsch and Sorensen buffers, required for Group 4 and 5 solutions, are provided in the report.

Antiperspirant Patent

In U. S. Patent 2,412,535, E. L. Richardson and K. L. Russell point out that an undesirable result of using certain antiperspirants is the corrosive or weakening effect of such compounds on fabrics. Many methods have been proposed to overcome this effect on fabrics; among them being the use of addition agents like urea and other amides, and oxides, hydroxides and carbonates of aluminum, magnesium and zinc, and other compounds. Some of these addition agents do reduce or minimize the harmful effects of the antiperspirant on fabrics, but some of them also reduce the effectiveness of the preparation for controlling perspiration. The compounds employed by Richardson and Russell, however, are claimed not only to reduce the corrosive effects on fabrics, but to provide antiperspirant action as well.

This is achieved by adding to the recognized antiperspirant aluminum salts certain salts of acids of phosphorus. Thus, an effective preparation may contain aluminum sulphate or chloride plus aluminum orthophosphate or aluminum pyrophosphate. In making the antiperspirant preparations, the aluminum phosphates are added as such: the ratio of the aluminum salts has an important bearing on the effectiveness of the preparation with regard to effects on fabrics. For example, the following solution causes a tensile strength loss of 2.5 per cent on cotton fabrics:

Aluminum sulphate	**16 parts**
Aluminum phosphate	**4 "**
Water	**55 "**

However, the following antiperspirant solution produces a tensile strength gain of 6.3 per cent:

Aluminum sulphate	**19 parts**
Aluminum phosphate	**10 "**
Water	**45 "**

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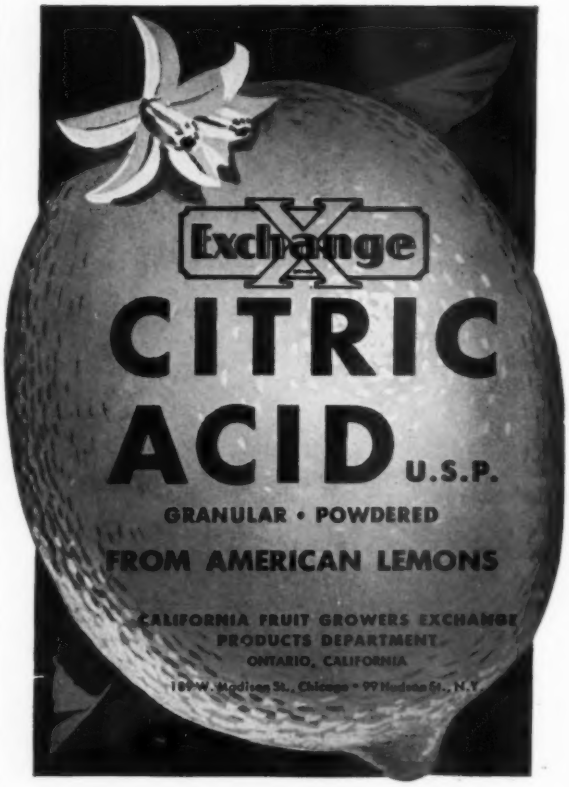

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Rickettsialpox—Newly Recognized Disease

Reports of cases of an unclassified disease were first received by the New York City Department of Health toward the end of June, 1946. Most of the cases came from a single housing development covering three square blocks in one of the five boroughs of the city. As news of the disease spread among physicians, cases located in three other boroughs were reported. The clinical features of this disease, now called rickettsialpox, have been studied by M. Greenberg, O. Pelliteri, I. F. Klein and R. J. Huebner (*J. A. M. A.* 133:901, 1947). The disease, spread by a rodent mite, is characterized by the appearance of an initial lesion about a week before the onset of fever, chills, sweats, headache and backache, and by the appearance of a maculopapular and papulovesicular rash about three to four days after the onset of fever. Except for leukopenia, routine laboratory findings are generally negative. The usual bacterial agglutination tests are uniformly negative; however, antibodies for rickettsialpox are demonstrable by means of the complement fixation test. There have been no deaths.

Lemon Juice Injury to Teeth

Very interesting is the report by E. C. Stafne and S. A. Lovestedt (*Proc. Staff Meet., Mayo Clin.* 22:81, 1947; also *Am. Dent. Assn.* 34:586, 1947) on the dissolution of tooth substance by lemon juice. Observations were made on 50 patients. Thirty-nine of these were women and 11 were men, a ratio of approximately 4:1. The patients came from twenty-two states, two Canadian provinces, Mexico and Puerto Rico; apparently such use of lemon juice is widespread. Striking uniformity was recorded as to the manner in which lemon juice was taken, namely by interval feedings in water. Use of lemon juice in self treatment was most common among persons who were suffering from rheumatism. The juice was also used for constipation, to prevent and relieve colds and occasionally as a tonic. When used as a reduction diet, the juice most often replaced entire meals. Most patients were aware of the high vitamin C content of lemons and desired an adequate intake of that vitamin. Defects in enamel produced by action of acid solutions are recognized by rounded margins in contrast to defects produced entirely by mechanical wear, which have sharper margins. The projection of fillings above the surface of the teeth is probably of greatest diagnostic value. These observations emphasize that extensive dissolution of dental structure may occur as a result of drinking lemon juice, particularly if the juice is taken daily and at times other than with meals. An adequate amount of vitamin C can be had without resorting to improper use of lemon juice. In view of its harmful effects on the teeth, Stafne and Lovestedt feel that the use of lemon juice as a daily drink in any appreciable concentration should be discouraged.

Propylthiouracil

Following work which showed that propylthiouracil has certain superiorities over thiouracil, W. S. Raveno (*J. A. M. A.* 133:1190, 1947) tried the newer drug on 54 patients with thyrotoxicosis. In a group of 18 previously untreated patients with thyrotoxicosis, 11 responded with abatement of symptoms, gain in weight and return of the basal metabolic rate to normal within four weeks on a dosage of propylthiouracil ranging from 50 to 150 mg. a day. One patient responded after 11 weeks' treatment, and in 1, drug fever developed after forty-one days. Five patients showed varying degrees of response just short of complete control because of too low dosage.

Thirty-six patients on maintenance doses of thiouracil were given propylthiouracil instead. The disease of 23 continued under satisfactory control while that of 13 was not controlled as well, again because of too low dosage. Apparently it takes at least 32 mg. of the new drug to match the effect of 100 mg. thiouracil, which would make the potency of the former three times that of the latter. Five patients unable to take thiouracil because of toxic reactions did not experience difficulty with the new drug. In 1 patient there developed typical drug fever, but no other toxic reactions appeared in the rest of the group.

On the basis of such observations, Raveno concludes that propylthiouracil is a potent antithyroid agent fully as effective and much safer than thiouracil, although it is not incapable of producing toxic reaction.

Combined Antacids for Peptic Ulcers

In the management of peptic ulcers, says I. R. Jankelson (*Am. J. Digest. Dis.* 14:11, 1947), a combination of colloidal aluminum hydroxide gel and magnesium hydroxide is an effective stable buffer which acts in the stomach for several hours. With this combination ulcer pain and heartburn may be controlled with smaller and less frequent doses than are required with the colloidal aluminum hydroxide gel alone. It can be continued for long periods without the danger of an acid rebound, alkalosis or aggravation of constipation.

Trench Mouth and Vitamin C

In a discussion of the relationship between trench mouth, scurvy and vitamin C, A. G. Schnurman (*Virginia Med. Mo.* 74:21, 1947) disagrees with certain views concerning the oral infection. He maintains that the fusospirochetes are present in normal mouths as well as in trench mouth, so that a positive gingival smear alone is not sufficient evidence for making a diagnosis of trench mouth. If the vitamin C excretion in a twenty-four hour urine specimen is less than 13 mg., a positive gingival smear is of utmost diagnostic significance. As the result of deficiency in vitamin C an anaerobic state is created in the tissues and at the same time intercellular cement substance breaks down, allowing a port of entry to otherwise harmless saprophytes into an ideal medium where they be-

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come pathogenic. The author presents a technic for the rapid determination of vitamin C levels in body fluids and shows that patients with trench mouth who have low vitamin C diets improve without any other treatment than large doses of vitamin C.

Treating Plutonium Poisoning

It is pointed out by J. Schubert (*Science* 105:389, 1947) that the great increase in availability and use of radioactive elements has intensified the need for effective treatment of radioelement poisoning. Many of the long-lived radioelements, including plutonium, which find their way into the body are deposited mainly in the skeleton. An appreciable amount of plutonium is also found in the liver and spleen. The dangers of plutonium far exceed those of radium poisoning because of the relatively large quantities of plutonium available from the "atomic" piles and because of the number of individuals exposed.

From a consideration of ion exchange principles, notes Schubert, it may be predicted that the excretion of plutonium from "plutonized" animals would be increased by treatment with large amounts of the soluble salts of certain metals. The metals considered suitable for this purpose were those possessing a high value and a metabolism similar to plutonium. An ideal metal would combine maximum displacing properties with minimum toxicity. The treatment, called metal displacement therapy, uses an innocuous metal, zirconium, to hasten the removal of plutonium from the body. Although the work is still in very early and preliminary experimental stages.

Vaginal Absorption of Penicillin

The advantages of administering single large doses of penicillin by the vaginal route are indicated by M. A. Goldberger, R. I. Walter and L. S. Lapid (*Am. J. Obst. & Gynec.* 53:529, 1947). The available literature, they note, contains no information on this method of administering penicillin, yet such data is necessary before the drug can be used in the local infections commonly encountered in obstetrics and gynecology. In their investigations on ten patients, vaginal suppositories of calcium penicillin in a cocoa butter base were used. Check of blood levels and urinary excretion of penicillin showed that therapeutic levels are easily attained and maintained for at least three hours. Because penicillin in the form of suppositories is readily absorbed through the vagina, these authors feel that this method warrants further clinical trial and may prove to be the method of choice for administering penicillin to the adult female.

Synthetic Folic Acid

Folic acid is the newest member of the vitamin B complex, and its therapeutic use in the treatment of pernicious anemia, nutritional macrocytic anemia and the macrocytic anemia of pellagra, pregnancy and sprue is bringing the fields of hematology and nutrition closer together. Folic acid occurs in nature in a free form and also as a part of various complexes. Recently, T. D. Spies and his associates (*J. A. M. A.* 134:19, 1947) have investigated the effects of a synthetic folic acid. Their report provides information on the first patients with sprue, addisonian pernicious anemia and nutritional macrocytic anemia to whom synthetic pteroyldiglutamylglutamic acid, which is a conjugated form of folic acid, has been administered and found to be effective in producing a hematologic and clinical response. This substance differs chemically from the L. casei factor (folic acid) in that it has 2 more molecules of glutamic acid and is not excreted so promptly in the urine of persons with macrocytic anemia as is the L. casei factor. Pteroyldiglutamyl-glutamic acid and the L. casei factor, if given in sufficient amounts, are capable of producing a hemopoietic remission.

Vitamins and Acutely Ill Patients

In a study of the metabolism of vitamins in acutely ill patients, S. M. Levenson and his associates (*Ann. Surg.* 124:840, 1946) report that six patients with severe injuries, hemorrhage or infection were found to have definitely abnormal metabolism of ascorbic acid, thiamine, riboflavin and nicotinamide. Studies were made of plasma ascorbic acid levels and excretion of the vitamins. Both "high" and "low" saturation tests were made. Abnormally small amounts of one or more of the vitamins were found in many specimens from all patients. Abnormalities were most marked when the patient was most ill, that is, when metabolic disturbances of carbohydrates, proteins and adrenocortical hormone were also most marked. The evidence is believed to give further support to the value of administering vitamins to acutely ill patients. Daily doses believed reasonable were not less than 1 Gm. of ascorbic acid, 50 mg. of thiamine, 50 mg. of riboflavin and 500 mg. of nicotinic acid, during the period of acute distress and for 2 or 3 days afterward, with reduced doses subsequently, until convalescence is established.

Russian Blood Substitute

In a report in the *American Review of Soviet Medicine* (4:243, 1947) N. A. Fedorov points out that saline solutions are not good blood substitutes in patients with considerable hemorrhage and in a state of traumatic shock. The prerequisites for a new blood or plasma substitute is inclusion in the saline solution of a colloidal component which can provide stability of the solution in the blood vessels. In the search for such a colloidal substance there was suggested for intravenous use a solution of protein obtained from casein of cow's milk. Russian workers developed a system of fractionization of crude casein which eliminates substances responsible for the primary toxic and anaphylactogenic properties. A formula of the protein solution has been worked out based on all necessary requirements including its ionic and molecular composition. It contains salts used in Ringer-Locke solution with an excessive amount of sodium bicarbonate which is essential for the complete solubility of casein. This colloid-saline solution, known as "Colloidal Infusin," resembles human plasma in its general osmotic pressure, pH, and viscosity. It is made of:

Sodium chloride	**7.0 Gm.**
Potassium chloride	**0.1 "**
Calcium chloride	**0.1 "**
Purified casein	**30.0-40.0 "**
Sodium bicarbonate	**2.5 "**
Water	**1000.0 "**

A highly valuable property of this solution is its ability to withstand high temperature. The colloidal infusin is poured into ampoules and sterilized under 1.5 atmospheres without deteriorating the protein fraction. This preparation does not produce anaphylaxis and does not cause other toxic symptoms.

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READERS' QUESTIONS

PERMANENT WAVE CREAM: The writer is a subscriber to Drug & Cosmetic Industry and I should like to take advantage of your "Reader's Questions" with reference to a formula for a permanent wave cream. Kitchener.

A standard product of this type would consist of the following:

Lanolin	**20.0**
Absorption base	**20.0**
Ammonia	**10.0**
Sodium sulfite	**5.0**
Sodium hydroxide	**0.5**
Water	**44.5**

The ammonia, sodium sulfite, and sodium hydroxide are dissolved in the water which is then incorporated in the mixture of lanolin and the absorption base at slightly above room temperature. It may be necessary to modify somewhat the ingredients and their proportions in the water but the general idea of these products is a water-in-oil cream in which the water phase consists of a concentrated permanent wave solution.

DEODORANT COLOGNE: Some time ago I read in your magazine something about deodorant cologne. Could you give me a good recipe for such a preparation? Buffalo.

I think that you will find the following preparation, a so-called toilet vinegar, in line with what you want; it will serve as a... experimental basis for further work:

Oil bergamot	**0.5 parts**
Oil lavender	**2.0 "**
Oil white thyme	**0.5 "**
Oil clove	**0.4 "**
Tr. benzoin	**10.0 "**
Ethyl acetate	**1.0 "**
Acetic acid 100%	**2.0 "**
Alcohol	**35.0 "**
Water to make	**100.0 "**

Mix the first six ingredients in the alcohol. Mix the acetic acid with the water and then mix the two solutions. Set aside for about a week in a closed container and then filter.

Another preparation along the same lines with perhaps more positive deodorant properties can be made along the following lines:

Salicylic acid	**2.0 parts**
Aluminum chloride	**4.0 "**
Cologne spirit	**30.0 "**
Rose Water	**54.0 "**
Glycerine	**10.0 "**

Dissolve the salicylic acid in the cologne spirit, and the aluminum chloride in the rose water. Mix and add the glycerine. A more delicate perfume may be used if desired.

MULTI-PURPOSE LOTION: I have been attempting to formulate a skin lotion that could be used for several purposes—as a hand lotion, powder and make-up remover, powder base, after-shave or as a protective film to the skin upon going out into the cold, wind and sun. One of the ingredients must be about 1 per cent of lanolin. If possible, I should like to have the formula composed of the following materials since I carry them on hand for other products; stearic acid, glycerine or propylene glycol, Carbowax 1500 or 4000, triethanolamine. South Bend.

Frankly, a preparation such as you want is quite a tall order and I doubt very much that any single preparation could do all the things you desire. However, using ingredients you list, I would suggest that you try the following formula. Though primarily a hand lotion it may be adapted for use as a powder base and as a skin protective.

"Carbowax" compound 1500	**5.00**
Propylene glycol	**3.33**
"Carbitol"	**5.00**
Triethanolamine	**0.17**
Stearic acid	**3.00**
Potassium hydroxide 85%	**0.08**
Lanolin	**1.00**
Sodium alginate (2%)	**1.66**
Water	**79.00**
Terpineol	**0.30**
Perfume	**as desired**

HAIR POMADE: We are regular subscribers to your magazine and would like to know what we can add to pomades having a petrolatum base to increase their firmness. Any suggestions will be greatly appreciated. Philadelphia.

The incorporation of a small proportion of beeswax should give the desired effect.

WAVE SET: Can you provide me with a wave set formula which could be adjusted so that it could be used on a comb and applied to a child's hair? London.

A suitable formula could be based on the following:

Gum karaya	**2.0**
Methyl parahydroxybenzoate	**0.2**
Borax	**1.0**
Distilled water	**86.8**
Alcohol	**10.0**

This could be adjusted to the desired consistency either by varying the amount of gum or by varying the quantity of water.

Perfumer's Shelf

Indian Orange Oil

Detailed examination of Indian orange oils have been made by G. M. Nigam and S. Dutt (*Indian Soap J.* 11:245, 1946). The types of oil examined included those distilled from ripe peels, cold pressed from ripe peels and distilled from raw peels. The orange trees were all of the variety known as *Citras nobilis*. There are two crops; the first flowers in October and matures before the following September and is the smaller or "puncha" crop; while the second flowers in April or May, matures from November to March and is the large "nancha" crop. From the raw peels the yield of puncha oil is about 1 per cent and is of low quality, while the yield of nancha oil is of superior quality and is 2 to 3 per cent. Nigam and Dutt point out the bouquet of orange oil depends upon the presence of an orange wax in the oil which acts as a fixative. Thus cold pressed oil which contains wax has a better odor than the distilled oil which does not. Syhlet orange oil contains more wax and has an even better odor. Caprylic esters of linalool and nonyl alcohol were found to be mainly responsible for the characteristic odor of orange. The aroma of the oil could be correlated with the nonyl caprylate content. On steam distillation these esters are hydrolyzed so that in the distilled oil only linalool alcohol was found. Ripening of the peels was examined and it was found that as ripening proceeded the limonene present was converted to open chain compounds, a natural breaking down of ring structures which could not be performed in the laboratory.

Physical examination of the three types of oils showed that the oil distilled from ripe peels had the following constants:—

Specific gravity at 18° C.	**0.8494**
Refractive Index at 18° C.	**1.4750**
Acid value	**Nil**
Saponification value	**5.1**
Saponification value after acetylation	**9.5**
Optical rotation in chloroform at 23° C.	**+114.0°**

The oil from cold pressed ripe peels had the following constants:

Specific gravity at 18° C.	**0.8553**
Refractive index at 18° C.	**1.4730**
Acid value	**2.42**
Saponification value	**11.9**
Saponification value after acetylation	**28.65**
Optical rotation in chloroform at 23° C.	**+114.3°**

The oil from raw peels was found to have the following constants:

Specific gravity at 18° C.	**0.8476**
Refractive index at 18° C.	**1.4700**
Acid value	**Nil**
Saponification value	**3.41**
Saponification value after acetylation	**6.42**
Optical rotation in chloroform at 21° C.	**+114.0°**

All three types of oil were further fractionally distilled and the various fractions obtained examined in detail both chemically and physically.

Chemical Microscopy of Cassia and Cinnamon Oils

Resuming his studies of the chemical microscopy of essential oils, L. W. Greene (*Am. J. Pharm.* 119:59, 1947) has turned his attention to cassia and cinnamon oils. He notes that three kinds of cinnamon oil are of commercial importance. These are cassia (U.S.P.), cinnamon bark and cinnamon leaf oils. The bark oil is about ten times more expensive than cassia oil, while the leaf oil costs less than half as much. Cinnamic aldehyde is the main constituent of cassia and cinnamon bark oils. Other compounds found in these oils include cinnamyl acetate, phenylpropyl acetate, methyl *o*-coumaric aldehyde, salicylic aldehyde, coumarin, benzoic acid, salicylic acid, benzaldehyde, methyl salicylaldehyde, eugenol, and phellandrene. Cinnamon leaf oil contains a high percentage of eugenol.

Cinnamic aldehyde reacts with strong alkalies to produce cinnamic acid. Because of their high aldehyde content, it was thought that cassia and cinnamon bark oils might yield crystalline reaction products with aqueous and alcoholic alkalies. With a saturated solution of sodium hydroxide in absolute ethyl alcohol, specimens of cassia oil formed a cloudy, yellow, amorphous precipitate, but no crystalline structure was seen. The same reagent, when mixed with specimens of cinnamon bark oil, gave small clumps of crystals. Cinnamon leaf oil gave long, needle-like crystals. Further work may show that the reagent is useful to differentiate between cassia and cinnamon bark oils, and both oils from cinnamon leaf oils.

While 30% aqueous sodium hydroxide is immiscible with cassia and cinnamon bark oils, when drops of each are mixed on a slide, they generally solidify almost immediately to a white or faint yellow crystalline mass, which develops a definite structure in one or two hours. The crystals thus formed show strong interference colors in polarized light.

Sodium phenate (or phenoxide) is a useful reagent for characterizing these oils. It is prepared by dissolving sodium hydroxide in phenol in molecular proportions with sufficient water to make a 20% solution. If a 60% solution is employed, the preparation solidifies to a semi-solid mass without definite crystalline structure. Both cassia and cinnamon bark oils react with 20% sodium phenate solution to form a crystalline product within 10 minutes. Under the miscrocope, the preparation is filled with long, slender needles which radiate from points throughout the field and overlap. In polarized light, these radiating clusters exhibit beautiful feathery markings in brilliant colors. Cinnamon leaf oil does not produce a crystalline reaction product within an hour and sodium phenate appears to be of considerable value in differentiating between the bark and leaf oils.

When a saturated solution of potassium hudroxide in absolute ethyl alcohol is employed as a reagent, both cassia and cinnamon bark oils produce long, needle-like crystals. The crystals are weakly anisotropic in polarized light and are practically invisible in ordinary light. This reagent causes cinnamon leaf oil to solidify to a solid, anisotropic mass without definite crystalline structure.

A crystalline phenylhydrazone is formed when phenylhydrazine reacts with a cinnamic aldehyde present in cassia and cinnamon bark oils. When a drop of the reagent and a drop of either of these oils are mixed intimately on the slide, the preparation solidifies at once to a crystalline mass of interlacing needles. By allowing the reagent drop to flow slowly into the oil drop, clearly defined crystals are formed. Cinnamon

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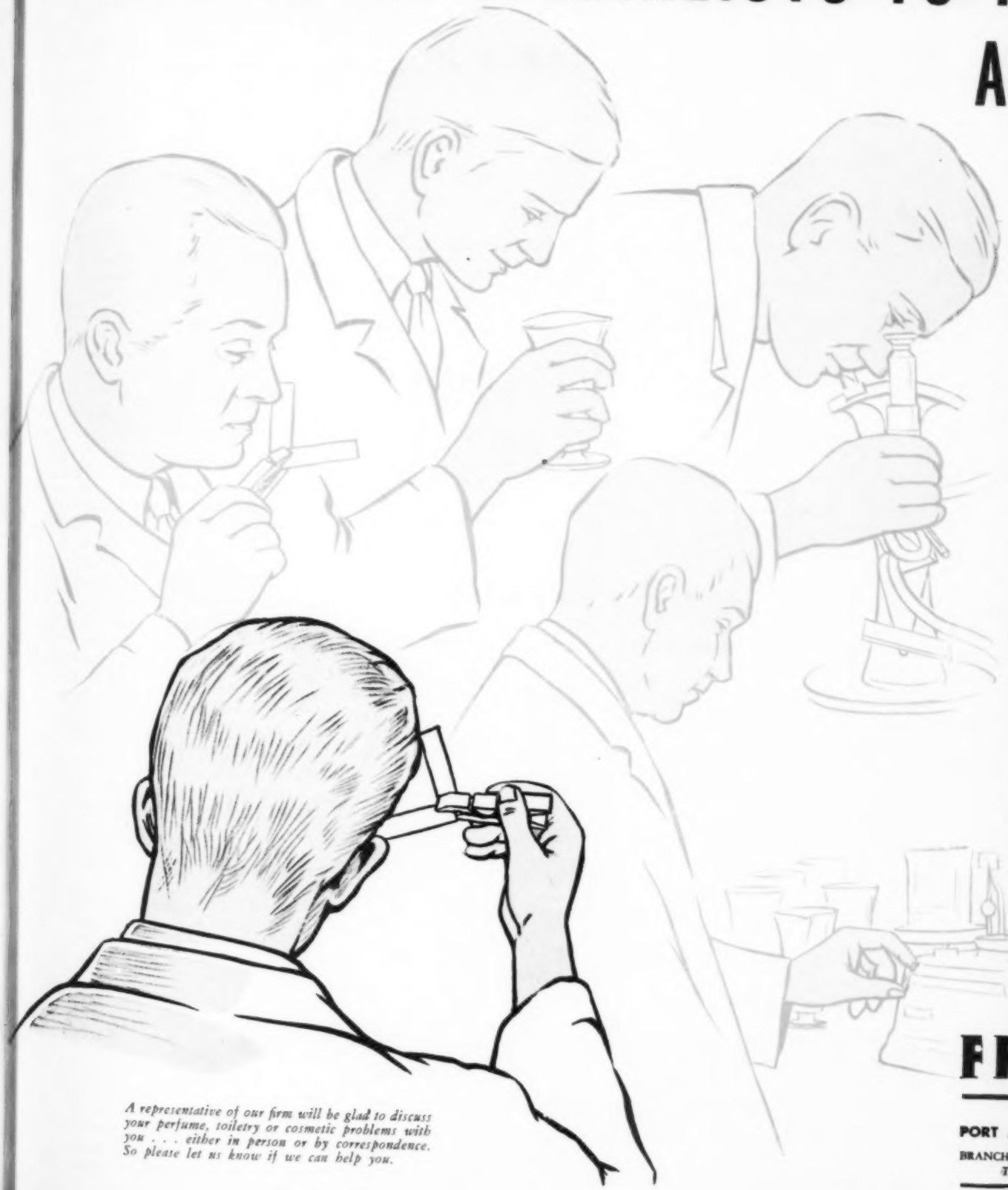

A representative of our firm will be glad to discuss your perfume, toiletry or cosmetic problems with you . . . either in person or by correspondence. So please let us know if we can help you.

FR

PORT A

BRANCH O
To

TO YOUR STAFF.... AT OUR EXPENSE

HAS it ever occurred to you that when you select us as your suppliers, you automatically increase the number of highly trained specialists seriously interested in the problem of making *yours* a *better* perfume? We pose this question because manufacturers incline to overlook the fact that some of the industry's best creative minds and leading authorities in the field of essential oils and aromatics head the technical and scientific laboratories of our firm. As active participants in our daily staff councils, they contribute directly to the solution of problems submitted us by our customers.

We offer you the assistance of these specialists, not with the idea that they can substitute for your own staff's efforts, but rather that they will complement and enlarge this work in such a way that finer perfume and cosmetic formulations will result. It has been proved time and time again, that many trained minds, focused upon a single problem, bring better results more quickly, than one mind attempting it alone. For this reason we urge you to let our perfume specialists collaborate with yours in the development of more appealing, more salable finished products.

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← ← ← ← *PLEASE UNFOLD THE PAGE*

EXTRA QUALITY, TOO....

CERTAINLY, the value of extra quality raw materials to the finished fragrance cannot be denied. And, so, we're happy once again to be able to offer rose extractions as fine as those described on the following page. Those who use them—and there isn't one perfumer who does not require at least a touch of genuine rose in his formulas—will find these offerings far different from many of the rose imitations he was compelled to use throughout the war. Just try these and see!

PLEASE TURN THE PAGE → → → →

FRITZSCHE BROTHERS, Inc.

ROSE USP XII KAZANLIK

EXTRA

THIS PRODUCT of the world-renowned Bulgarian distilleries has all of the attributes of a thoroughly fine rose oil—the purity, strength and beauty that lent distinction to the best pre-war grades of Otto of Rose. You'll find you can achieve better odor effects more economically with this powerful Bulgarian Oil. May we quote you and demonstrate its superiority?

ROSE

ROSE USP XII KAZANLIK

FARMER DISTILLATION

IN SPITE of the fact that this oil is the product of small farmer producers, it is, never-the-less, a very high grade of rose oil. Carefully bulked for uniformity, it is well adapted to general use in fine perfume and cosmetic work. It is somewhat lower priced than the "Extra" grade described above. We are well placed on both of these oils and would be glad to discuss the possibility of supplying your entire season's requirements.

. . . AND LAST BUT NOT LEAST

ROSE ABSOLUTE

SEILLANS

Now available — a material unmatched for richness and tenacity of fragrance or for its range of application. This is your opportunity to acquire stock of one of the finest and most useful perfume raw materials.

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leaf oil gives a pale yellow color with phenylhydrazine but no crystals. Thus the reagent is useful in differentiating the cinnamon bark and leaf oils.

If a drop of benzidine is mixed with a drop of either cassia or cinnamon bark oil, a yellow anisotropic mass of crystals forms immediately. This mass consists of hundreds of perfect and imperfect diamond-shaped plates. In order to obtain a reaction product suitable for examination under the microscope, a very small amount of reagent is used; just enough to wet the tip of a stirring rod.

Perfuming Industrial Products

In an article in the *Perfumery and Essential Oil Record* (38:6, 1947) S. P. Jannaway points out that the significance of aromatic materials extends beyond the realm of perfumes proper, soaps, cosmetics and the like. Today perfuming agents enter into a vast range of industrial products and processes. They are used, for example, in fabrics to cover up the unpleasant odor of certain finishing materials. Similarly, they enter into paints, leather, linoleum, medicines, ink, whiskey, foods and a host of other products. Many of the objects which are considered daily necessities would be unusable because of bad odor, were it not for perfuming.

A recently developed perfume of interest is in connection with air conditioning. Air conditioning brings a cooler temperature but an atmosphere lacking in the freshness of out-of-doors. By the use of certain perfumes, it is now possible to supply this freshness. Perfumes for use in theatre and household sprays, disinfectants, insecticides, naphthalene and *para*-dichlorbenzene blocks and polishes are well known. Less familiar at present are compounds devised to modify the odor of plastic materials, coated and impregnated papers, glues, adhesives, linoleum, artificial leather, inks, rubber and paints. Many of the "industrial perfumes" are, of course, merely covering agents, designed not to impart a definite perfume odor but to mask the unpleasant effluvia of solvents, waxes and other raw materials. It may be noted, also, that some of the aromatics used in this connection are effective fungicides and preservatives. Examples are thymol and carvacrol; other phenols and alcohols, etc., may be employed as modifiers. The value of certain isolates and essential oils as antiseptics has been the subject of many interesting investigations.

Pine tar and other odorous materials have been utilized to cover the smell of rubber, synthetic rubber and latex, especially for use in rubber footwear, drug sundries, household goods and wearing apparel.

Jannaway notes that American producers have marketed carnation type perfumes for disinfectants, insecticides and "para" blocks; also new mown hay for disinfectants and kerosene sprays; rose and pine for industrial deodorants, and several compounds of the Russian leather type for polishes. In his opinion the field for future development in industrial perfumes is a very wide one. Frequently an unusual stability to chemical reaction or heat is required. Solubilization in oils or in water is another factor that sometimes has to be taken into account.

Ambergris and Its Substitutes

A report of a two-ton find of ambergris prompted E. Hardy (*Manuf. Chem. & Manuf. Perf.* 18: 122, 1947) to review famous finds of past years and the various subsitutes for this valuable perfume fixative. Ambergris is formed in the stomach of the sperm whale from irritation set up mostly by the horny beaks of an undigested mass of cuttlefish, the whale's chief food. An abscess is formed in the intestine, and this usually bursts and the gray, waxy mass of ambergris is ejected. Ambergris is most often found in the waters off New Zealand and Australia and in the Indian Ocean because these regions lie on the migration routes of whales to and from Antarctica. The musky odor of ambergris, which consists mostly of ambrein ($C_{32}H_{40}O$), originates from the characteristics odor of the cuttlefish upon which the male sperm whale feeds. The synthesis of ambergris from cuttlefish is a formidable task, and Hardy doubts its success. However, attempts will probably continue since no other substance imparts such a subtle velvetiness to fine perfumes with the same qualities of persistence.

Many artifical ambers available commercially are based upon labdanum, an oleoresinous secretion from the leaves of several Mediterranean rock roses. It is also found in the yellow-flowered *Cistusvulgare* (Formentosus) and in the hoary rock rose *C. canum* (anglicus) which grows in Britain, Ireland, most of Europe, North Africa and Western Asia. Other British flowers which produce labdanum are the rare white-flowered *C. polifolium* and the spotted rock rose *C. guttatum*. These substitutes are extracted either with petroleum ether or alcohol to make commercial products with different odors suitable for use in cheap perfumes. According to one authority, the best ambergris substitutes are derived from the rock roses growing in the Esterel country to the west of Cannes in the French Riviera. Another Mediterranean plant with a leaf and stem oil suitable for use with the substitutes is the common cypress, which grows abundantly in Italy. In concluding, Hardy notes that methyl nonyl acetic aldehyde will strengthen the odor of synthetic ambers.

Cyprus Essential Oil Industry

The potentialities of Cyprus as a source of essential oils is indicated by N. C. Lanitis in a report in *The Perfumery & Essential Oil Record* (38:89, 1947). Cyprus is a country with a typical Mediterranean climate. Indeed, because of its high hills, it possesses all the possible plant varieties of this climate. It is a country very rich in aromatic plants and in which literally any aromatic flower suitable for extraction can be cultivated. The essential oils that are produced in Cyprus can be divided into two broad categories. The first category consists of oils distilled from wild plants, the most important of which are: laurel, juniper berry, pine needle sage, origanum, thyme. The second category consists of oils and concretes derived from plants and flowers that must be cultivated; in regard to the oils, these are: true anise, bitter almonds, cummin, lavender, lemon, neroli, orange, peppermint, rose, rosemary. Of these, anise, bitter almonds, cummin, lemon, neroli, orange and petitgrain, are distilled or expressed from plants, seeds, flowers or fruit, as the case may be, produced by the Cypriot farmer and which, therefore, are bought in the open market. The raw materials for the other oils together with all flowers for the extraction of concretes must be cultivated by the distiller himself.

Taking into consideration all the essential oils that can be produced in Cyprus either from wild or cultivated plants, it may be said that the quality of the oils is high, provided of course reasonable care is taken during their manufacture. Some of them, especially laurel, pine needle, origanum, thyme, true anise, cummin, lavender, hand-pressed lemon and orange, petitgrain and rosemary, may be considered as among the finest in the world.

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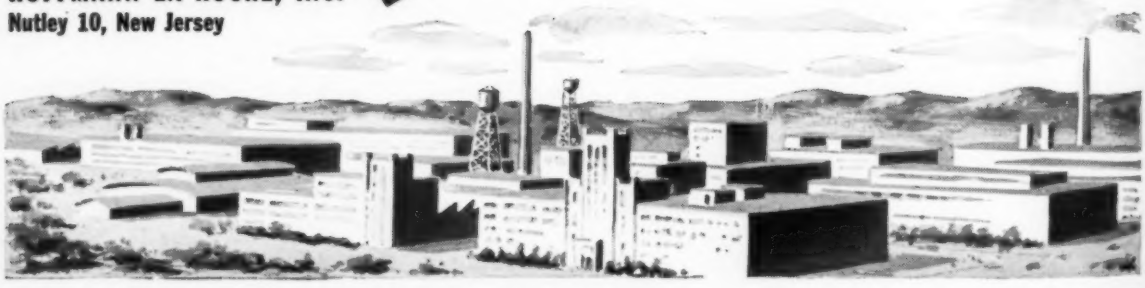

PURCHASING DEPARTMENT

Refined Glycerin Drops 20c a Pound. Alcohol Eased. Penicillin Prices at New Low. Menthol Continues Firm.

An easier price situation developed at the beginning of June in refined glycerin when chemically pure and other grades were lowered 10c per pound. During late trading an additional reduction of 10c was inaugurated placing the drum carload price at 30c per lb. Large consumers had been buying sparingly and supplies of both crude and refined glycerin are expected to increase with the greater availability of raw materials for soap production.

For the first time in several years the supply of glycerin has caught up with the demand and in some quarters it is stated that stocks exceed current demands. Such a condition may only prove temporary even from a domestic standpoint since normally there is usually a let down in demand for this major chemical at this season of the year. By August several major domestic consumers may again be in the market for increasing quantities.

There remains a shortage of glycerin in the world market and each day brings numerous export inquiries in the market ranging in quantities of from 25 to several hundred tons. Export control of glycerin is scheduled to end June 30 if not renewed.

Glycerin production in the United States reached an all-time high of 69,000,000 pounds the first four months of 1947, representing an increase of almost 25 percent over the same period last year, N. N. Dalton of the Glycerin Producer's Association said at the fifteenth Midwest regional meeting of the American Chemical Society.

The record output was attained despite the increased manufacture of synthetic cleaners yielding no glycerin, according to Mr. Dalton, who pointed out that glycerin is an important by-product of soap-making.

It is not considered likely that the inroads of synthetic detergents on the consumption of ordinary household soaps will have any serious effect on the production of glycerin in the near future, he stated.

Many attempts have been made to synthesize glycerin, using such sources as sugar beets and rice, according to Mr. Dalton, and in World War II an American distiller tried to recover glycerin from distillery wastes. None of these efforts has succeeded on a commerical scale, however, he stated, adding:

"While occasional emergency problems may be partially solved through the production of synthetic glycerin from petroleum gases, it is probable that for many years hence most of the world's commercial production will continue to come from the fat-splitting industries."

In any event, with regard to both soaps and glycerin, he asserted, the market seems able to absorb both the natural and synthetic output.

Alcohol Shortage Eased

Ethylene, sulfite liquor, and potatoes are the raw materials that are providing more of the nation's postwar alcohol supply along with corn, while the use of molasses has been cut in half. In normal times, prior to government control, corn and molasses were the major materials for industrial alcohol manufacture. More corn is finding its way into distilleries than last year, but the total use of all grains is down considerably.

The Treasury Department's Alcohol Tax Unit shows that for the 9 month period, July 1947-March 1948, the use of grain products for industrial alcohol amounted to 329,232,823 pounds, as compared with 1,175,909,825 pounds during the corresponding period in 1945-46. Only 44,150,389 gallons of molasses entered alcohol against 88,370,384 gallons in 1945-46.

Industrial alcohol plants, on the other hand, reported the use of 550,371,988 pounds of potatoes and potato products during the 9 months, compared with 91,533,916 pounds in the previous period.

For many consuming lines the alcohol shortage is a thing of the past, and it was even noted at the recent meeting of the American Drug Manufacturers Association that the supply now seems adequate. It was stated that the use of synthetics and other items had greatly increased the demand, and attention was called to the fact that the price has increased to practically four times the prewar cost.

Penicillin Prices Yield Before Rising Competition

Volume production of penicillin has trimmed the price to a small fraction of its original cost. Competition in this item is the keenest in the pharmaceutical business with buyers hesitating where a few cents are concerned while at one time they bought without regard to price.

Since the first of this year the price of penicillin has dropped to less than a third of the January level which at that time broke through a dollar for the standard hundred-thousand unit package.

The ultimate comparison is the $20 charged for this same amount in 1944 to the $8 that was more or less standard when initial large-scale production began.

Part of the reason for the rapid decline has been improvement in mass-production techniques which enables plants to out-produce by far the peak capacities originally held possible.

Moreover, newer plants have been swinging into production steadily and an important factor was commercial production of crystalline penicillin requiring no refrigeration, which set up a huge demand for the trouble-free type and led to dumping of stocks of amorphous penicillin in a rush.

Under the productive push output jumped to more than 27 trillion units last year, is now running at a pace of well above 30 trillion, and might reach 35 trillion units this year. This indicates an output of roughly a third of a billion standard doses.

The export field is the bright hope for the producers at the moment but even here the competition is stiff. This competition, however, is still between American interests because British production, beset by handicaps, has not kept pace.

• Prices quoted in this section were current on the first of this month.

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Essential Oil Prices Continue Downward Trend. Anise Oil Records New Low. Drastic Reduction in Rose Oil.

The essential oil market continues to find buyers' resistance forcing averages downward. There is some doubt in the trade here as to just how far this trend is likely to go in view of economic and labor conditions in such lands as British India and the Dutch East Indies.

In the aromatic materials market, products made from raw materials of strictly domestic origin are in a very firm position primarily because of increases in labor costs. Certain raw materials are still in a tight position. The situation on vanillin has improved slightly, although the product is by no means plentiful. Phenyl ethyl alcohol continues to be in rather short supply as is amyl cinnamic aldehyde, amyl salicylate, terpineol and terpinyl acetate. The price status on lemongrass has made it possible to reduce the price of its derivatives, ionones, methyl ionones, and citral.

Exports of Essential Oils, Ceylon

Ceylon's exports of citronella oil during the last half of 1946 amounted to 708,462 pounds, valued at 4,461,190 rupees, compared with 459,136 pounds and 1,408,156 rupees in the like period of 1945. Such exports in the January-June period of 1946 amounted to 1,017,251 pounds valued at 4,256,726 rupees.

In 1946, the United States imported from Ceylon 312,446 pounds of citronella oil, valued at 1,669,285 rupees.

Exports of cinnamon-leaf oil from Ceylon in the last 6 months of 1946 amounted to 698,208 ounces, valued at 280,721 rupees as compared with 415,480 ounces and 145,417 rupees in the corresponding period of 1945. In the first half of 1946, such exports totaled 526,895 ounces, valued at 210,756 rupees.

During 1946, the United States took only 500 ounces of cinnamon-leaf oil, valued at 200 rupees. In the second half of 1945, however, the United States imported 106,368 ounces, valued at 37,228 rupees.

Ceylon exported 6,437 ounces of cinnamon-bark oil, valued at 50,915 rupees, during the last 6 months of 1946 compared with 2,724 ounces, valued at 15,322 rupees, in the like period of 1945. Throughout the first half of 1946, exports of cinnamon-bark oil amounted to 7,296 ounces valued at 47,542 rupees.

The United States received 4,662 ounces of cinnamon-bark oil, valued at 34,529 rupees from Ceylon during 1946.

Anise Oil Drops

There were several price reductions in anise oil during the past two months with the result that spot prices reached a new low for the movement at a range of from 75c to $1.00 per pound. The quantity of stocks available could be seen in figures released by the American Consulate General at Hong Kong, which pointed out that during January and February of this year declared exports of anise oil from that port to the United States totaled 883,860 pounds, valued at $331,238.

Patchouli Oil Firm

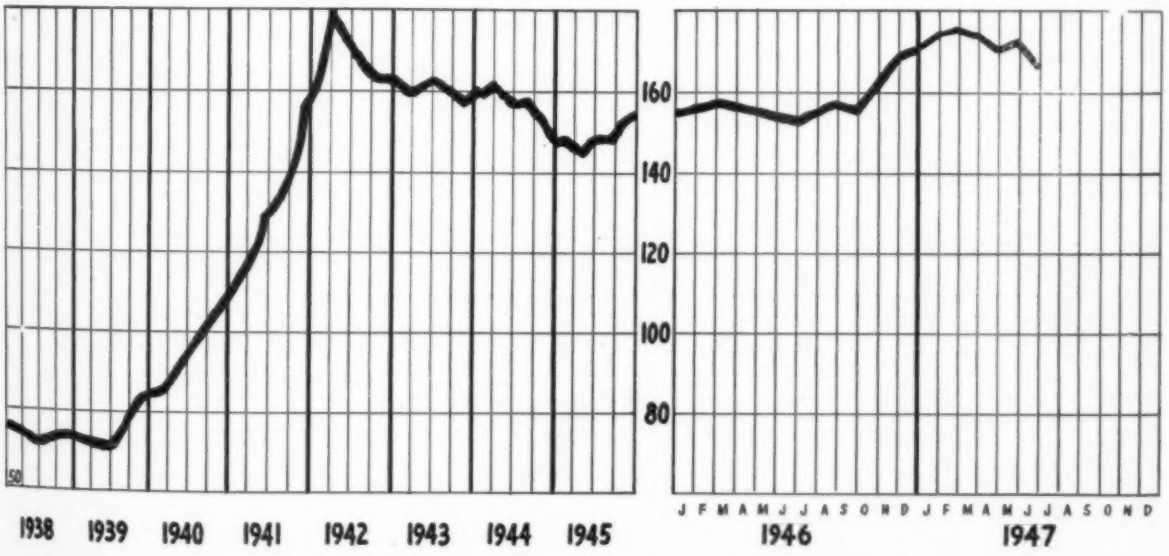
Those suppliers who had been quoting their stocks at far below the general market price were falling more in line as quotations for the oil ranged from $30 to $40 per pound. Stocks were still thin as the occasional shipments that did arrive were immediately taken up.

Reports from producing centers gave strong indications that the prices here would be subject to very sharp decreases eventually; but, as long as stocks remain as thin as they have been recently, there was little chance of these decreases taking effect.

Rose Oil Declines

Lack of interest in rose oil at the prices originally proposed by the economic mission from Bulgaria some weeks ago had its expected reaction as prices tumbled drastically. It had been anticipated that Bulgarian need for American credits would be far greater than our need for rose oil at inflated prices, and the accuracy of this expectation was seen in the fact that stocks were currently being offered at from $18 to $25 per ounce in contrast with the $36 to $42 per ounce recently in effect. Demand for the oil had been very spotty at the inflated prices but it is now felt that the much lower prices would have a stimulating effect upon the market.

50 Raw Materials—Weighted Price Index. 1926=100.



The price index of fifty commodities for June declined from 171.7 to 165.1.

THERE IS NOTHING BETTER THAN

Italian TALC

The Standard for Over 50 Years

Italian Talc is, and always has been, the recognized standard in the cosmetic industry. In France, as in other countries, users of talc turn to Italy, where the natural rockstone produces a superfine product. It combines in the highest degree the features most desired. It has an unusual, silky texture.

The world's leaders use only Italian Talc.

CHARLES MATHIEU INCORPORATED

Representatives in the United States and Canada of the Italian Producers

77 RIVER STREET, HOBOKEN, NEW JERSEY

LAUTIER FILS

Natural and Aromatic Raw Materials
Essential Oils
for

Perfumery •

Cosmetics •

Soap •

Lautier Fils

INCORPORATED

154-158 WEST 18th STREET NEW YORK 11, N. Y.

Grasse Paris London Beyrouth

MANUFACTURERS OF QUALITY RAW MATERIALS FOR PERFUMERY FOR OVER 100 YEARS

JUNE PRICE CHANGES

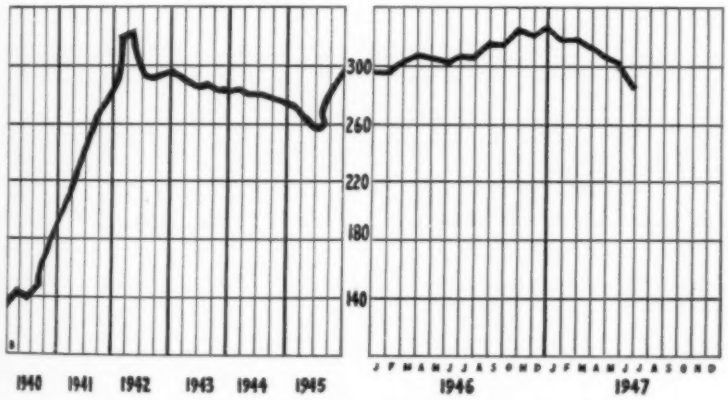
UP

Juniper berry oil $1.
Juniper wood oil 12c
Patchouli oil $2.

DOWN

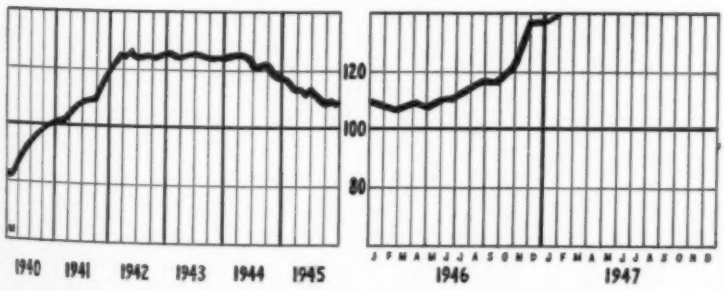
Aloes, Curacao 4c
Anise oil 15c
Anisic aldehyde 10c
Arnica flowers 5c
Bay oil 15c
Benzyl cinnamate 35c
Formate 40c
Propionate 20c
Salicylate 15c
Bergamot oil 45c
Bois de Rose 10c
Burdock root 1c
Cade oil 10c
Calamus oil $2.50
Calcium stearate 2c
Cananga oil Native 5c
Candelilla wax 11c
Carnauba wax #1 20c
Carvol $3.
Cascarilla bark 20c
Cedar wood oil 15c
Citronella oil Ceylon 65c
Clove oil 5c
Coriander oil 50c
Ethyl cinnamate 30c
Eucalyptol 20c
Geranium oil African $2
Bourbon $1
Ginger oil $1
Glycercin CP 20c
Grape fruit oil 12c
Helonias root 5c
Iso Eugenol 35c
Jaborandi leaves 1c
Lemon oil Calif 15c
Lemon grass oil 60c
Magnesium stearate 3c
Mastic gum 5c
Nutmeg oil 25c
Peppermint oil Nat. 30c
Redist. 15c
Pimento berry oil $1.50
leaf oil 5c
Rhubarb root HD 5c
Rose oil, Bulg. $12
Saffron root 5c
Senega root 15c
Senna Tinnevelly 3c
Spearmint oil $1.50
Stearic acid TP 2c
Terpineol 3c
Tragacanth Gum #1 25c
Gum #2 25c
Zinc Stearate 3c

15 Botanicals—Weighted Price Index. 1926=100.



The botanicals index declined from 300.1 to 292.9. Aloes, rhubarb and senna were lower.

15 Medicinal Chemicals—Weighted Price Index. 1926=100.



The medicinals index remained without change at 168.1.

Camphor and Camphor Oil, Japan

Japan's output of camphor and camphor oil in January 1947 amounted to 80,765 kilograms and 77,764 kilograms, respectively. During 1946, production of camphor aggregated 476,361 kilograms, and of camphor oil, 587,052 kilograms, states a Far Eastern trade paper.

During the period from September 1945 to December 1946, camphor exports totaled only 30 metric tons, all destined for the United States.

The decline in production of camphor results from the great shortage of camphor trees. If reforestation is carried on, certain sources believe that the scheduled output goal of 2,000 to 2,500 metric tons each year may be attained.

Essential Oil Shipments from Hong Kong

Declared exports of essential oils from Hong Kong to the United States during January and February 1947 included 24,800 pounds of cassia oil valued at $55,022; 883,860 pounds of aniseed oil, valued at $331,238; and 3,600 pounds of camphor oil, with a value of $1,400. Most of these shipments were reexports from neighboring countires.

Exports of Essential oils, France

During February 1947, declared exports of essential oils from the Marseille Consular District of France to the United States were valued at $6,125. These exports consisted entirely of lavandin oil. In the corresponding month of 1938, declared exports of essential oils to the United States included lavender oil, valued at $16,014; almond oil $3,035; and other essential oils, $2,722.

Declared exports of essential oils from the Marseille Consular District to the United States in January 1947 were valued at $43,720. In comparable month in 1938, exports of essential oils to the United States were as follows:

CRYSTACLEAR

REG. U. S. PAT. OFF.

Makes crystal clear solutions
THAT STAY CLEAR INDEFINITELY

without filtering . . . can be dissolved in distilled water alone or if you wish 25% alcohol can be added. State odor preference.

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515 South Fairfax Ave Los Angeles 36, Calif.

QUALITY RAW MATERIALS

Our complete stocks guarantee that you can obtain the exact grade and quality for your requirements without delay.

BEESWAX, sunbleached and yellow
Refined U.S.P.
TRAGACANTH GUM, all grades
KARAYA GUM, all grades
STEARIC ACID, fancy triple pressed
QUINCE SEED, Persian, recleaned

also

SPERMACETI WAX CERESIN WAX
CAMPHOR

and all other cosmetic raw materials. Samples on request.

Write for latest stock list

WALTER H. JELLY & CO.
INCORPORATED
412 N. Western Avenue Chicago, Illinois

FOUNDED T & B 1856

The Symbol of Standardization

GUMS

ARABIC
TRAGACANTH
KARAYA

WHOLE GUM—Cleaned and repacked before shipment.

POWDERED GRADES—Standardized by milling under strict laboratory control.

GRAIN GUMS—Graded to uniformity and standardized.

T & B STANDARDIZED GUMS are your best protection against production difficulties.

All Powdered Gums Standardized by Laboratory Control

THURSTON & BRAIDICH
286 Spring Street New York 13
Represented in Chicago by A. C. Drury & Co., Inc.

Nothing New has been added!

- Only the choicest of the world's crude beeswax goes into it.
- Chemically tested for purity and quality.
- Sun-bleached to a smooth, even-textured whiteness.

BEEHIVE BRAND
Beeswax

And because of its superior quality you can use less and still get a finer finished product. Guaranteed pure . . . Guaranteed always the

Will & Baumer Candle Co., Inc.
Established 1855
SYRACUSE, NEW YORK

Spermaceti Composition | Ceresine Waxes | Red Oil Stearic Acid | Yellow Beeswax Hydisteor

Lavender oil $605; bitter-almond oil, $194; jasmine oil, $2,633; other floral oils, $5,145; and other essential oils, $5,946.

Bergamot Down

A sharp drop was noted in the spot price of oil of bergamot with the range now at from $4.50 to $5.50 per pound. Stocks were beginning to pile up in this country to a rather embarrassing extent, as buying in Italy became a simple routine. Selling here, however, met with some opposition.

Olive and Olive-Oil Report, Greece

Harvesting and processing of olives in Greece were completed this year by by the end of February. Estimates are that about 83,000 metric tons of olive oil and about 35,000 tons of edible olives were produced, compared with the average production of 80,000 tons of olive oil and 30,000 tons of edible olives in the years 1942-46.

Prices paid to producers have increased steadily since the announcement that the Greek Government was considering measures for exporting several thousand tons of olive oil to the United States. Retail prices, on the other hand, remain at about the same as in October, 1946.

Total stocks of edible olive oil are estimated at 25,000 metric tons which, added to the estimated 1946 production of 83,000 tons, places the total supply for the year (November 1, 1946, to October 31, 1947) at about 108,000 metric tons.

Menthol Steady

The spot market for natural menthol held relatively steady but some quarters expect that over a moderately distant future, the trend may be downward.

The Brazilian Government Trade Bureau has declared the market in Brazil had already slumped so far from its peak that the government was seeking ways to bring stabilization to the distressed market. The bureau said that reduced buying by the United States had left a substantial surplus of stocks in Brazil. An idea of the drop in business may be gained from the fact that 800 tons of the 1944-1945 crop had been destined for the United States but the decrease in demand left 360 tons unsold in Brazil. In the first eight months of 1946 the decline in exports continued, reaching a low of 224 tons and leaving stocks totaling 436 tons. The future of prices appears to depend on what happens in Japan and China, both of which are returning to the international menthol market, plus Brazil, which country has an extended peppermint-menthol industry developed under the stress of war that cut off other sources of supply from the United States.

The U. S. Commercial Co., in calling for sealed bids on 1,200 cases of Japanese menthol, states that no bids will be entertained at below $7.24 per pound f.o.b. Japan. Four hundred cases will be available for June-July shipment; 4,000 cases for July-August, and the balance for August-September.

Local houses believe that the $7.24 price on menthol f.o.b. Japan will mean a cost price of $8 per pound duty paid including freight, insurance and other charges. June-July shipments will not reach here until September-October which is rather late for the heavy consuming season. Moreover, the quantity of 12 tons covering the earliest shipments.

Exports of menthol crystals from China reportedly are showing marked increases. During April 1947, such exports totaled an estimated 60,000 pounds. Of this amount, 47,000 pounds were shipped to the United States, compared with 16,200 pounds in the preceding month.

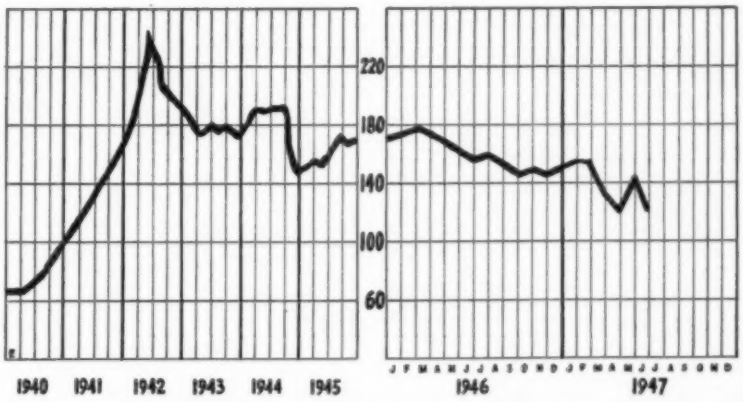
Vitamins Down

Producers of niacin reduced prices for this item by $1 per kilo and now offer 50 kilo drums at $6 per kilo. One half kilo drums are quoted at $6.30 per kilo. Niacinamide also declined $1 per kilo to $9.50 in 50 kilo quantities and $985 in ½ kilo drum. Riboflavin was also reduced. A 1 kilo can is now $1.50 per kilo, 25 gram bottle 18c per gram.

Agar Agar Exports, Japan

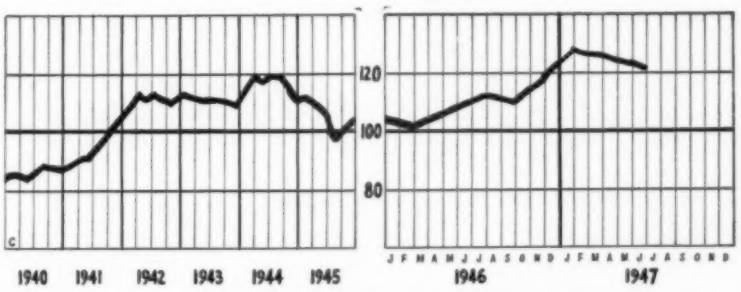
Japan's exports of agar agar to the United States amounted to 50,000 pounds in January 1947 (the same quantity as in the preceding month) and were 30,000 pounds in November 1946. Such exports to Great Britain in January 1947 totaled 200,000 pounds, states a Far-Eastern trade journal.

15 Essential Oils—Weighted Price Index. 1926=100.



The essential oils index declined sharply from 141.9 to 124.2. Anise, Bergamot, Bois de Rose, Citronella, Clove, Geranium, Peppermint and Rose Oils were lower.

25 Cosmetic Raw Materials—Unweighted Price Index. 1926=100.



The cosmetic raw materials index declined from 125.8 to 123.0. Candelilla, Glycerin, Stearic Acid and Gum Tragacanth were lower.

KOMMON SCENTS!

Radio is overlooking a couple of wonderful comedy writers if they don't hire the Senators now preparing the 15% rent increase. The increase has as much to do with rent control as hormones and birth control.

•

The legislation is the greatest contradiction in terms since Hitler asked for Peace.

•

A "control" technique was used on OFA; remember? But the country's finally realizing there's a considerable difference between price control and controlled prices.

•

Getting a direct answer from a politician is tougher than the steak on a table d'hote dinner. Hearing legislators talk out of both sides of their mouths isn't half so frustrating as the realization that nothing is coming out.

•

Judging by the criticism of Rent Control, the Taft-Hartley Bill and the proposed tax schedule, Truman will probably be responsible for the most overworked Veto since Marcantonio.

•

The President, incidentally, is badly in need of a pen that writes under hot water. There's been nothing but discord since he moved his piano into the White House.

•

There must be times when he doesn't know whether he's trying for Unification of the Army and Navy, the nation or the New York subway system. He's even afraid to listen to the Detroit Symphony Orchestra for fear of a sudden sitdown strike while Margaret is singing.

•

Oh, well, as a friend observes, "there's no use worrying about life. You'll never get out of it alive."

•

Take the Cosmetic Industry, f'rxample. The Luxury Tax finally has meaning to us. It's a luxury to stay in business these days.

George Fiedler

KELTON

Cosmetic Company

230 West 17th Street, New York 11, N. Y.
763 So. Los Angeles Street, Los Angeles 14, Calif.

Private Label Manufacturers Exclusively
Covered by Product Liability Insurance

Control Procedures

(*Continued from page 40*)

logical prerequisites in sampling and analysis. For example, sampling or analysis, in connection with a control procedure, are not significant, and at best only adventitious, unless the following requirements relating to sampling are observed:

1. A sample must be truly representative of the whole.
2. Homogeneous lots may be sampled portionally.
3. Heterogeneous lots must be sampled geometrically.
4. The greater the expected variability of a lot, the greater the number of samples to determine the mean and its deviations from the mean.
5. Samples should be large enough to reduce error.
6. Unless geometric sampling is done, random sampling should be employed.
7. In continuous processes, periodic sampling should be performed during manufacture.

1. *A sample must be truly representative of the whole.* The practice of removing a small portion of a lot for sampling, is based on the assumption that it is an exact qualitative replica of the whole lot. Often, certain simple but essential means are taken to assure such representation. For example, emulsions, suspensions, ointments or powders must be thoroughly mixed, to assure complete homogeneity. Clear solutions are assumed to be homogeneous. If a number of *batches* constitute a *lot*, it cannot be assumed that all batches are identical, and therefore, each batch or portion of a lot, must usually be subjected to sampling.

2. *Homogeneous lots may be sampled portionally.* A simple withdrawal of a casual portion suffices for the sampling of a clear solution. In testing sterility or for the presence of pyrogens, aseptic precautions must be observed in removing a sample. Although, fine powders may also be considered homogeneous and satisfactory for this method of sampling, absolute assurance is imperative, that the lot so sampled is homogeneous.

3. *Heterogeneous lots must be sampled geometrically.* A strict interpretation would define as heterogeneous, any lot, the components of which are of greater than molecular fineness. In practical application, however, such substances as granules, crystals, tablets, capsules, coarse to coarse-fine powders, botanicals, such as seeds, etc, are subject to geometric sampling. This is performed by visualizing a large portion of the batch as a solid geometrical figure, such as a sphere, cone or cube, sampling from two or more parts of the visualized figure, and repeating the sampling on analogous sites of the same figure superimposed visually on another part of the same lot.

4. *The greater the expected variability of a lot, the greater the number of samples to determine the mean and its deviations from the mean.* This principle would find its greatest application in natural products in which a fluctuation of active principles is usually found, due to

seasonal or geographic variations, or conditions arising from storage. Digitalis leaves, yeast powder or talcum would fall in this category. Since the proportion of active principles or contaminants is expected to vary, numerous samples must be taken from each lot (multiple geometrical sampling) and each lot must be sampled.

5. *Samples should be large enough to reduce error.* The smaller the original sample, the greater the chance, that the result will not reflect the true situation of a lot. For example, although only one tablet of a lot is sufficient for an analysis, a great probability exists, that that given tablet may not be representative of the lot. Increasing the number of tablets reduces this probability. Depending on the size of the lot, at least 20 tablets should be sampled, and if desired, an aliquot should be subjected to analysis.

6. *Unless geometric sampling is done, random sampling should be employed.* The purpose to be served is to reduce the probability of an untrue reflection of the nature of a lot. Therefore, except in the case of homogeneous liquids, samples from a lot should be taken at random from more than one part of a lot.

7. *In continuous processes, periodic sampling should be performed during manufacture.* Although sampling during manufacture is often desired in batch processes, it is imperative in continuous processes, to detect errors or mishaps during manufacture. A common example of the need for sampling during manufacture, is exhibited in tablet compressing. Assuming that the mixture is uniform, and granulation is satisfactory, tablets should be weighed several times an hour as they are ejected from the compressing machine. A number of practices have become axiomatic in control procedures. The most important, which apply in the manufacture of *any* drug or cosmetic, are listed here:

1. An observation, finding or comment should be recorded immediately after it has come to cognizance. Time, even in minutes, tends to dilute a fact with a personal reaction or rationalization. An impression may require modification, but such further explanation is made possible, if there is a factual basis for investigation.

2. In recording observations, facts, not conjectures should be noted. Deductions proposed in the search of a reason, can only be based upon facts, not speculation. Explanations cannot be hypothesized on belief, but on fact.

3. Batches while in process should be properly labeled, showing the stage of manufacture which they have reached, or should be accompanied by the production control forms.

4. Batches held in bulk, preceding packing should be properly labeled or accompanied by the production control forms.

5. Lot numbers should be assigned on the production record, *before* the making of a batch is begun, so that a given batch may be readily identified from the moment that the manufacturing receptacle is made ready.

6. The assignment of control numbers or lot num-

FOR THE COSMETIC TRADE

Unusual handling, conditioning and milling techniques make these raw materials for cosmetics the finest obtainable.

▼

ACACIA GUM

ARABIC GUM

BENZOIN GUM

HENNA

KARAYA GUM

LAVENDER FLOWERS

MYRRH GUM

ORRIS ROOT

QUINCE SEED

ROSEBUDS

SANDALWOOD

TRAGACANTH GUM

▲

Write for your copy of our complete 1947 price list, soon off the press

R. J. PRENTISS & CO., Inc.

110 WILLIAM STREET, NEW YORK 7

9 SO. CLINTON STREET, CHICAGO 6

Tombarel Freres
GRASSE

ABSOLUTE SUPREME
Flower Essences

the same dependably fine products as always

JASMIN SUPREME
CASSIE SUPREME
ORANGE FLOWERS SUPREME
ROSE SUPREME
TUBEROSE 22
ORRIS CONCRETE
ORRIS ABSOLUTE
OAKMOSS PRODUCTS
RESINOIDS . . . etc.

Tombarel
PRODUCTS CORPORATION
L. J. ZOLLINGER, PRESIDENT
12 EAST 22nd STREET, NEW YORK 10
CHICAGO—A. C. DRURY & CO., INC.
219 EAST NORTH WATER STREET

bers, should be the responsibility of only one individual, in a given department.

7. A sufficient quantity, over and above that consumed in analysis, should be drawn from each lot (or each portion of a lot) which should be labeled, sealed, and stored as control sample.

8. No more than the exact number of labels should be made available for finishing a lot. Labels supplied in answer to a requisition, should have the lot numbers printed or stamped, before they are given to the labeling department.

The system of control procedure, as represented by the following forms, is comprehensive but general. Adaptations will essentially be necessary for the variety of products for which this system can be employed. For example in the manufacture of ointments, suppositories or lipsticks, the space for filtration method will not apply, but the melting point should be noted. Similarly, pyrogen tests, for example, are not applicable to cough mixtures or hand lotions.

Forms in the "100" class are concerned with *Raw Material Control.* Form 101 represents a record, on which receipt of a raw material is noted. Each sheet is intended to record one raw material product, so that a subsequent receipt of the same product will be in a place and form in which it can be easily found or traced. Form 102 is the *analysis sheet* for determining the identity, purity and potency of raw materials. The necessity of testing a raw material is becoming more and more apparent, for no security is afforded that a raw material is up to specification, unless confirmed by analysis. Form 103 is a label which the laboratory issues, certifying that it has tested the raw material, and had passed it for use in manufacture. The raw material control number from this form, is then entered in the sixth column of Form 101. No raw material should be used unless it bears such a *Passed* label (Form 103) issued by the laboratory. Form 104 (which is analogous to Form 404, the latter used in testing the final product) indicates the methods to be employed in the testing of a given product. These will vary from one material to another, depending on its nature: in some instances the simple notation "USP XIII test for melting point, identity and assay, page. . . ." will do.

Forms in the "200" class pertain to manufacture with respect to the *master formula.* Form 201 represents a master formula sheet which is quite self-explanatory. Form 202 represents a record of batches or lots manufactured.

Forms in the "300" class relate to actual production. In initiating production an exact copy of the formula from Form 201 is copied onto Form 301. However Form 301, the *production record,* carries additional elements, not present on Form 201, in that space is provided for entering the make of the raw material used, the maker's control number, spaces for indicating the initials of the individual weighing the ingredients, and the initials of the individual checking the weights. An example of a modification of a production record is noted on Form 302 which is a special form for the

processing of parenteral products. In the same fashion, forms for the processing of solutions, tablets, ointments, creams, lipsticks, powders, etc., can be devised, each of which should give information pertinent to the proper control of a product, and through which the origin or the history of a product can be traced back from any stage of manufacture. When the manufacture of a bulk lot has been completed, it is sampled according to good sampling practice, and the sample is sent to the analytical laboratory. Thereupon, Form 303 is appended to that manufactured bulk product, ordering that it should be held, until a release is received from the analytical laboratory.

Forms in the "400" class are analogous to those in the "100" class, in that both are concerned with analysis; those in the "100" class with analysis of raw material, and those in the "400" class with analysis of the finished product. Form 401 is the analytical report on the basis of which Form 402, the *release order*, is issued. On the basis of the release order, the lot held in abeyance can be sent further for processing, and in effect, this release order cancels the hold order (Form 303). In varying frequency, a manufactured lot will be found to differ from specification. In such an event, Form 403, a *stop order* prevents further processing, until instructions regarding reworking or discarding are received. Form 404 indicates the methods to be employed in testing the finished product.

Irrespective of how careful the control procedure may be, it becomes useless or even dangerous, unless rigid precautions are taken to assure the use of proper labels. Various methods may be found satisfactory as precautions against improper labeling or mixup of labels. It will however be found most satisfactory, to require that a special requisition should be made, for a *specific number* of labels, which number should correspond exactly to the number of units to be labeled, from a given lot. In following this practice, a possible error can be checked, if a disparity exists between the requisition of labels and the actual yield, or if labels are found to be short or over, in labeling a given lot. Before the labels are issued on the basis of a requisition, the lot number for which they are intended, should be printed on them.

The labeling department should not be responsible for either selecting the labels it is to use, or for printing the lot numbers on the labels. Its efforts should not be divided into operations other than the affixing of labels to a finished product.

How To Start a Cosmetic Business

(Continued from page 31)

comer faces the problem of shouldering his way into some branch of the industry already more than adequately supplied with excellent products. A few do it each year, but it takes unusual marketing skill.

It has happened, with perfumes and cosmetics, that a product with unusual appeal has presented little or no problems in marketing except perhaps to hold it

U.S.P. Zinc Oxide

New Jersey Zinc

Quality and uniformity of this purest grade of commercial zinc oxide are assured by nearly a century of zinc oxide manufacturing experience.

Exceptional whiteness, fineness and purity, coupled with its non-toxic, protective and mildly astringent qualities, make it an especially valuable pigment for pharmaceuticals. Its covering power and adhesive properties are ideal for cosmetics.

Have you tried The New Jersey Zinc Company's ZINC BORATE–3170?

Specify U.S.P. Zinc Oxide made by—

THE NEW JERSEY ZINC COMPANY

Products distributed by

The New Jersey Zinc Sales Company

New York · Boston · Chicago
Cleveland · San Francisco
Los Angeles

HILARY SAYS:

MAYBE—you're an Orange Man (not very plentiful in Ireland—but here every Fruit Store has one)—or did you see a June bride last month—with orange blossoms? For that particular fragrance (an' I don't mean—the bride), an orangeade won't fill the bill. But try:

NEROLI

No. 739	$ 9.—a pound
No. 260	$16.— "
No. 556 Extra	$24.— "

(One of the finest, super-duper-de-whooper-hopla Nerolis made in France—and worth every penny of the 24 bucks. Send 4 sample and c l l).

ORANGE BLOSSOM

No. 761	$ 8.—a pound
No. 632	$20.— "

THE Good Old Days.....? Sure they were! Mighty good, at that.—B u t: Would you like to operate that'n way again: Kerosene lamps,—horse-and-buggy or go coaching around in a brand new Model T Ford,—the hand-grind wooden coffee mill;—or: sport one of those handlebar hair-decorations on your upper lip (unless your name is Smith,—you feel like dropping a cough and sport it from the chin downward).

IS there anyone who dare deny that the outhouse was a "good-old" American custom—highly respected and institutional? Time marches on—with newer ways of doing things! For the last word in mixing:

LYSILIA—"the greatest thing" out of post-war France!

ORCHIDEELIA—for a floral bouquet—body-and-soul!

ALDEHYDILIA—Aldehyde Top Note!

FLASOLEE—another "Must" for fine floral compounds!

AMBERS—good old-fashioned fixatives;—believe me, Brother,—they'll fix-ya and you'll stay fixed!

THOSE Frenchmen weren't kidding when they said LYSILIA is "Sans pareille!"—and "the greatest thing"! Would you like samples?—Just drop us a note! By the way,—consultations with us—like the samples—are for free.

J. HILARY HERCHELROTH

representing

Cresp Martinenq — Established 1782 — Grasse, France

369 Third Avenue — New York 16, N. Y.

In Havana: Lainz y Cia Aguiar 615

within reasonable bounds. But most of the newcomers that have some reason to hope for success, have only minor variations in individuality to attract retail or public notice. Their product may be better or different, but it is not apt to be strikingly so; their package may be unique and have great appeal, but displayed with many other perfumes and cosmetics much of its luster is merged; the idea or theme may be excellent, but it is not quite hot enough to avoid the need to sell it.

And so, given the product, the package, the idea, or theme, the great problem of the newcomer is marketing.

Few industries offer the variety of avenues for sales success that are open for cosmetics. The beauty parlor, direct selling to the consumer, mail-order are some outside the retail trade. Even here there are many small, successful enterprises operating in a variety of ways—specialized appeal and contacts with groups, such as nurses; the ethical procedure of the pharmaceutical manufacturer in detailing doctors are two of many such variations.

The retail trade, which accounts for 90 per cent of cosmetic sales falls into three large groups, each of which serves many largely non-competitive groups of manufacturers.

These retail groups are: (1) variety stores (2) the mass drug store market composed of the large bulk of independent drug stores, chain stores and as distributors, the drug wholesalers and (3) class or prestige perfumes and cosmetics in selected distribution—a combination of department stores supported by class (from a cosmetic view-point) independent and chain drug stores.

The first essential test of marketing competence must be the selection of the sales field. This choice will depend on the nature of product, package and theme or idea; on price and the cost of production; on experience and natural inclination; on capital available.

Briefly, the variety stores require a theme suitable to variety store clientele; an ability to produce or establish a private label source capable of meeting the prices sought by this clientele; an ability to advertise, usually in national magazines, read by this clientele; and an ability to learn this specialized field of selling and to find personnel experienced in selling this field.

Variety stores are largely a national market where the national advertiser has a great advantage. It is a difficult field for a new company with small capital resources. Most of the selling to the consumer must be done by manufacturers' advertising. The store offers you traffic and display. You do the rest.

The drug store market has some of these characteristics. With the exception of the top 4,000 competent stores in the selected distribution field, the price line of cosmetics average well below the department store; the store offers little sales help beyond display; sales are largely limited to heavily advertised demand items; local advertising and cooperation are difficult to arrange. There are opportunities for local or sectional development working initially with the better stores to establish a local retail reputation, for the company with moderate capital.

Chain drug stores are organized to give vigorous retail cooperation for a product and company they are willing to favor. Most chains have some class cosmetic stores, trained retail salesgirls and organizational ability to carry through on a promotional plan. They afford an excellent chance for sectional development. Whether or not they are the most desirable starting point for a new manufacturer depends on the product and company identity he wishes to establish in the early stages of development.

The department store is the usual starting point for a class, prestige product. It offers many advantages to the new manufacturer. One store may give city or community distribution, nearly all local newspaper readers can reach this store; many of these stores have a loyal clientele whose influence in the community is substantial; the reputation of the store can give an excellent community introduction for the manufacturer's goods both to the public and other retailers.

The great advantage of the department store lies in its value, as a case history, for a new company seeking retail recognition. A retail case history may be established in a chain, or the cosmetic "A" stores of a chain or with one or a few independent druggists, to provide a factual spring-board for further expansion. A primary advantage of the department store lies in its proved value as a focal point for retail expansion.

Most new enterprises introducing a cosmetic or perfume are too impatient. They are unwilling, or seem to think it unnecessary, to prove that their product is acceptable to the consumer—that the consumer, after using a full jar or reaching the bottom of the bottle will return to repurchase that same product. It doesn't seem to occur to these newcomers that the retailer who invests his money in these goods is vitally interested in this, in the sellers financial responsibility, or ability to aid in promotions, and in discovering what kind of sales policies will be put in effect. There is a mystic belief in advertising, and an equally mystic belief that retail relations means simply getting an order from the buyer.

There are too many ways to start marketing a perfume and cosmetic to recount here. This is a highly individualistic industry. But in my opinion, there is only one safe, sure way for the new enterprise. And that is by the store case history method—one store if the capital is limited—a severely limited number, each in a territory marketing center, if capital is ample.

Anyone who sells one worthwhile store, and secures the cooperation of that store, is in business. He now has the opportunity to prove to other retailers that the product will sell, repeat and grow in sales. He can experiment with promotions, advertising in the local newspaper and prove that he has a marketing formula which builds sales. He can learn retail operation, what retailers want and how to work with them.

With the record of a case history success in a worthwhile store, that is, factual sales data, expansion is infinitely easier. Depending on many factors—capital, the product and its price, future distribution plans,

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etc., this expansion may be horizontal, that is, top stores in major cities, working down like the layers in a cake, through levels of national distribution. Or expansion may be vertical, that is, concentrated development of department, chain and independent druggist in a city, section or territory. The utmost flexibility is possible.

This variety of expansion methods has led many companies into trouble, often after making a small initial success. Too many fail to plan, to sight an objective. This results in a confused pattern of distribution or a confusion among retailers in regard to company policy. Or more often the temptation is to go too fast, after a small initial success. Distribution is diluted too much for anything that can be accomplished by the advertising.

About the hardest thing for most new companies to understand is that they can't avoid the element of time. It takes time in a retail store before the salesgirls know about the product, begin to understand it and start liking it; it takes time for advertising to start accumulating action; it takes time in a community before people who have heard about a product, read about it, seen it, make up their mind to spend some money and try it. About the unhappiest, most extravagant wasters of advertising money are the time jumpers. Time can't be jumped.

Anyone who continues to sell with success a perfume or cosmetic must set each foot firmly on a base. One of these bases is consumer relations. The other is trade relations. Each are equally important—the balance must be even. Even in mass or dense distribution when the seller often leans too heavily to one side, and begins to lose full contact with the other, then trouble in the form of diminishing volume, diminishing profits, or disintergration of sales in the most capable stores follow.

Future of Drug and Chemical Exports

(Continued from page 37)

its orbit and to induce American industry to go out and develop this field which formerly had been controlled at least to the extent of 75 per cent by Germany. It will be interesting to see whether this particular war-time policy of our Government will continue to be reversed and the Germans permitted and even encouraged to sell their drugs and chemicals under the old and well-known names to the detriment of our own Amiercan industry. I have been told that, through our own American embassies abroad, German trademarked pharmaceutical products have been offered for sale. The prices, it is true, are much higher than American prices, but it is stated that, of course, the well-known German names will naturally bring higher prices for the goods.

The main research plant of the German chemical combine is in the British zone of occupation. Thus scientific data and know-how is readily available to

the British pharmaceutical industry, and Britain, which heretofore has had no large-scale manufacture of pharmaceuticals, will have at hand the information and technical skill needed to develop their industry not only for their own needs but for export.

This constitutes a further important factor in evaluating the future of American drug and chemical export trade. After all, the countries in the Sterling area have credit balances in London of over 4 billion Pounds Sterling. They are naturally anixous to reduce them by securing goods. In these countries, dollars are scare—except in South Africa, the world's largest producer of gold. Dollar quotas for importation of American goods in the Sterling countries are becoming smaller and smaller. This situation can be met by American companies only through manufacturing in Sterling countries. The drive to "buy British" in these countries is intense. For instance, in Egypt, where price control limits the "mark-up" over cost of imported drugs, a 35 per cent mark-up is allowed on drugs imported from Great Britain, while American products may be marked up only 20 per cent. It is easy to figure out which products the dealers will push. Of course, if there is a unique and absolutely essential product, exchange to buy it will be found in any country that needs the product.

Many of the factors which influence our future we can control only to the extent of advice and suggestions given to our own government in the hope that it will adopt and maintain a policy that will not be detrimental to our export business.

When all is said and done, the future of the American drug and chemical industry, in the domestic and foreign fields, rests with the industry itself.

There are two main considerations in building a sound drug and chemical industry: price and product. Price depends on efficiency in production; knowledge or development of the most econmical processes. In our field, in particular, price and quality of a product are most important. Products themselves depend on research. The Germans attained their outstanding position in our field by extensive—and expensive!—research. Until recent years this field was neglected by our industry. A start has now been made, but the work must be intensified and vastly expanded if we are to maintain our position and strengthen it. Research is the most vital need of the drug and chemical industry, for without improved and new products the business will die.

Frostbite

(*Continued from page 43*)

plication of frostbite. The patient should be given warm drinks, especially tea, and warm food, and he should be covered with additional clothing to prevent further exposure. It is also desirable to put the patient in a shelter in which the temperature is about 60° to 65° F.

These basic principles should also be followed in the treatment of moderately severe or severe frostbite. In

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such cases, however, more specialized treatment is generally required. The application of cold to frostbitten parts is a traditional procedure. A number of investigators have gotten good results by refrigeration methods.[10] One group[19] reported dramatic improvement in patients treated by refrigeration. They employed fans blowing a current of air, chilled by ice trays, over the damaged extremities. Greene,[8] a strong advocate of refrigeration therapy, has devised a rather ingenious cooling cabinet for the damaged limbs.

In their report on trench and immersion foot, White and Scoville[6] stated that it is vitally important to keep the injured foot of the chilled patient cool while the body is warmed. This is best accomplished, they found, by exposing the legs below the knees to a cool room temperature and directing a blast of air from a fan or blower over them. The feet should never be rubbed or the blistered areas painted with a strong disinfectant. Like a second degree-burn, these areas should be handled with aseptic precautions. Sulfonamide therapy and a "booster dose" of tetanus toxoid is also recommended. Elevating and cooling the legs, they found, helps to drain the edema fluid and causes the blisters to shrink.

Others, however, do not advocate refrigeration therapy for frostbite. For example, the majority of patients in Brownrigg's[14] series were not treated by refrigeration. The limbs were elevated and exposed to room temperature, covered only with sterile towels and in the majority of cases protected from infection by mild skin antiseptics or a dusting powder containing one of the sulfa drugs. In none of these patients was there extension of existing gangrene and in none did gangrene occur if it were not present on admission.

Brownrigg, however, did make a comparison of the two methods. In a small series of cases, he employed refrigeration by means of ice bags. In bilateral cases, ice bags were applied only to one limb; the other being left exposed at room temperature. No appreciable difference resulted from the use of ice bags nor did the patients notice any subjective improvements in the cooled limb.

Davis and his associates[2] made a similar comparison between refrigeration therapy, as advocated by Greene, and exposing the parts damaged by high-altitude frostbite to room temperature. "In our judgment," they reported, "the results obtained by this method were equal or better than those obtained by continued cooling. It is our impression that less blistering occurred in those patients treated by cooling but on the other hand, the patients as a group, complained more of pain and required more sedation than those treated by exposure to room temperature and there was ultimately a greater loss of tissue."

Although the Russians have suggested that there may be certain advantages in rapid warming in frostbite treatment,[17] there is ample experimental and clinical evidence against the use of heat locally during the thawing period.[9,14,20] Ever since the observations of Larry, Napoleon's surgeon general, heat in the treat-

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ment of frostbite has been recognized as dangerous. The application of external heat to the frozen parts is harmful because it increases locally the metabolism of the tissues. The blood supply which may be quite sufficient at the low temperature of the tissue may be insufficient when the temperature is increased artificially. Therefore, the development of necrosis may be stimulated by heat. This is well established in frostbite caused by vascular disturbances alone.[4] Davis and his coworkers[2] have noted, as have other observers, that a frostbitten area is more apt to blister if it is rapidly warmed or warmed above normal body temperature than it is kept cool.

In the later stages, when an active improvement in the circulation is desired, short-wave therapy has proved useful. Following the lead of Italian workers,[21, 22] Liebesny[4] has found that such therapy is effective, even in cases of gangrene of the extremities. In frostbite of first or second degree complete recovery is usually accomplished in very few treatments.

Rubbing frostbitten parts is considered extremely dangerous.[8] Because of the risk of additional trauma to the tissues massage should be avoided in the early stages of treatment.[14] The old practice of rubbing the involved area with snow or ice is now recognized as harmful. Massage with a coarse towel or pinching and kneading the skin only tends to increase the damage and the risk of infection. Even small lesions must be handled meticulously.[15]

Because the temporarily devitalized, frostbitten tissue is highly susceptible, adequate precautions should be taken against infection. The value of tetanus toxoid has already been mentioned. Where spreading infection has appeared, incision and drainage, plus the use of sulfa drugs, are indicated. Lee[23] has reported a case of frostbite in which the use of an allantoin-sulfanilamide ointment proved very effective. In Germany, Luetkens[24] claimed good results from the topical application or baths of copper sulfate solution.

In treating frostbite, many workers[5, 25, 26] have found that sympathetic anesthesia or procaine infiltration of the sympathetic nerve is of definite value for producing vasodilitation, improving circulation, relieving pain and hastening healing. For example, Lerich and Knulin,[27] in France, recommended anesthetic infiltration of the lumbar and stellate sympathetic in patients suffering from frostbite with edama and pain. Nearly all patients were immediately relieved. If there was no necrosis or infraction, it was found that all the patients were well in a few days. In Russia, Burdenko[28] likewise noted that after such injections circulation is more quickly re-established, the danger of infection is lessened and other therapeutic measures are facilitated.

Alcohol injection or alcohol sympathetic block has yielded similar results. Disturbances of cutaneous sensation have been relieved frequently by temporary sympathetic block. However, when the symptoms were more distressing and not relieved by alcohol blocks, sympathectomy provided relief. This operation, in

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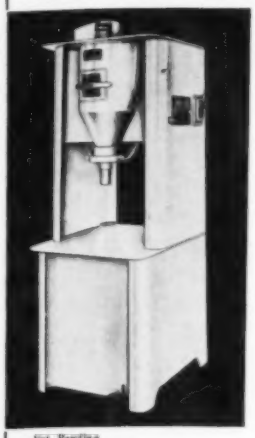

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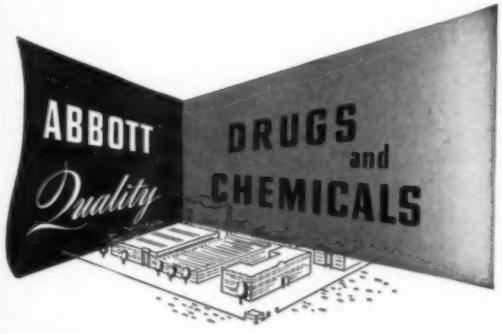

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which a part of the sympathetic nerve is removed, has produced beneficial effects on certain late symptoms of severe frostbite, but it does not relieve the deep pain or always prevent partial disability in selected cases.[29, 30, 31]

Investigations by Lange and his coworkers[18, 32, 33] indicates that the timely use of anticoagulant drugs may prevent the development of gangrene in severe frostbite. Studies have shown that, after frostbite, there is first a clumping of red blood cells in the smaller blood vessels as a result of loss of plasma through the walls of the vessels. The stranded red cells form a sludge, which after about seventy-two hours organized into thrombi or clots. It became obvious that efforts to prevent gangrene must be started before the stage of thrombus formation is reached. It was found that heparin, by reducing the rate at which blood coagulates, prevents the thrombosis or clot formation which leads to gangrene.

In experimental studies, these workers froze the legs of rabbits and administered heparin to half of them. All of the untreated animals developed gangrene and lost the entire leg as a result. None of the treated animals developed gangrene. Further studies were made on a group of human volunteers. Frostbite was induced by applying to the skin the bottom of small porcelain crucibles filled with dry ice. The controls developed necrosis of the exposed area, while the adequately heparinized subjects, apart from superficial blistering of varying degree, escaped any deeper injury.

A man who had been lying in the street at subfreezing temperature for at least fourteen hours offered an opportunity to give practical evaluation for the method. He was heparinized for five days. Although he developed considerable blistering, he escaped any permanent loss of tissue. Previous experience with similar cases suggested that without heparinization there probably would have been some loss of the extremities. Heparin must be injected, but it is possible that discoumeral, an anticoagulant effective by mouth, may also be useful in gangrene prevention.[1, 30]

Because frostbite may have serious consequences, prevention of cold injury is of paramount importance. Aside from the immediate effects resulting from tissue injury, damage to the circulatory system may cause a predisposition to peripheral vascular disorders. In tolerance of cold, chillblains and mild vasomoto changes of the feet are common after effects of frostbite and may persist for years.[10]

Conditions predisposing to frostbite are severe cold, wind, altitude and constricting clothing. Nutritional factors and physiologic conditions also enter the picture. People indulging in outdoor winter activities should know the signs of frostbite. One of the most important signs of impending frostbite is the appearance of a dull yellowish pallor. This is associated either with numbness or a prickling sensation. Very quickly, often in a matter of minutes, the skin will appear to have a dull waxy white appearance. The numbness or prickling sensation increases. Taking heed of these signs will frequently prevent more severe reactions.[15]

Clothing is important. Clothes should be loose, light in weight and warm. Clothing should be worn in layers to take advantage of the principles of insulation and to allow the proper escape of perspiration. Metal fasteners are best avoided, especially if there is any danger of contact with the skin. Clean dry socks are absolutely necessary to prevent cold feet and two pairs are far better than one. Shoes must not fit too snugly and must be kept dry. Gloves are also important and should be loose.

Of course the use of protective ointments and greases has been proposed many times. It is now well recognized that washing the skin prior to exposure to cold is a mistake because it removes the protective natural grease. However, according to White,[34] under extremely severe conditions considerable protection is obtained by greasing the skin preferably with animal fats, like lanolin or cooking fat, or even with mineral oil. These should be thoroughly rubbed into the skin, so that no excess is left on the surface.

Studies of the efficacy of several protective ointments, made by Davis and his associates,[2] did not yield results to indicate that such a line of investigation would prove worth while. The Russians,[35] after thorough investigations of many greases and ointments, concluded that such products do not effectively prevent frostbite. Relying chiefly on proper clothing, they condemned the use of such materials on the covered body, especially the feet. They issued orders that protective greases and ointments be restricted to the exposed parts of the body. One non-irritating protective ointment developed by their studies consists of:

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After later investigations, it was suggested that pure petrolatum replace all the ointments for the prevention of frostbite because petrolatum contains no skin irritants, is anhydrous, may be applied freely to exposed parts of the body, and is easily removed with soap and warm water.

There is considerable evidence that a poor nutritional state increases susceptibility to frostbite. When malnutrition and vitamin deficiency are present, as is often the case, the results of exposure to cold are greatly intensified. According to White[34] the diet in cold areas must contain a liberal proportion of fresh meat and of vitamins B and C. However, the results of studies by Glickman and his associates[36] indicate that the ability to withstand the damaging effects of exposure to cold cannot be appreciably enhanced by giving excessive doses of ascorbic acid, thiamine, riboflavin and nicotinic acid above the amounts required for adequate nutrition.

Physiologically, some people are more prone to frostbite than others. There are those who are hypersensitive to cold and break out in a form of hives when

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exposed. This, most likely, is a form of allergic reaction. Brahdy [37] has found an increased susceptibility to frostbite in people suffering from vascular diseases or diabetes. Such persons must be extra careful during cold weather. However, there are some otherwise healthy people who show a bad vasomoter reaction to cold. The simplest way to detect such sensitivity is to place the arm in cold water for a few minutes. In normal persons, the skin turns pink and a sensation of comfortable warmth quickly appears. If the skin remains pale and cold, the reaction is abnormal and the person is especially susceptible to frostbite. Unless this can be over come by methods of adaptation to cold, such sensitive people should avoid prolonged exposure to frigid weather.

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Make-Up Bases

(Continued from page 45)

a film which consists of pigments, filler and oil, the pigments and filler being predominant.

Methods used to vary the thickness of the film and therefore the concentration of color and opaque substances are primarily by controlling the ratio of powder to oil, and also by controlling the amount of opacity inducing substances such as titanium oxide present in the formulation. Water repellency is also a function of the type and the amount of oil used in conjunction with the amount and type of the emulsifying agent.

The formulations used in cake make-up preparations are many and diverse. They may be divided into two categories. However, from a production standpoint, the first and older formula consists of about 70 per cent of pigments and filler and 30 per cent of oil, humectant and emulsifier. These figures are not absolute, but average. The pigments and filler may be incorporated by

first grinding in a hammer mill or ball mill—dry, then incorporating into a cream or emulsion made by the addition of water to the oil humectant and emulsifier—by mechanical stirring—drying the paste thus produced and regrinding. The powder is then pressed into containers or into metal pans which may then be placed into containers.

The second type consists of a mixture where there is a higher ratio of oil, to pigment and filler, where the ground pigment and filler is incorporated by mechanical stirring and perhaps grinding while hot and then poured at elevated temperatures into their containers. The second type would necessarily contain a smaller concentration of pigments and filler than the first, but this may be compensated for by inclusion of larger percentages of titanium oxide.

Materials used in this formulation include mineral oil, glyceryl-mano-stearate cetyl alcohol, triethanolamine soaps, anionic soapless detergents and the nonionic emulsifiers as characterized by the mannitan, polyglycerol and polyglycol esters now available commercially.

The methods of preparation of these materials are by no means all inclusive, but rather examples of how they could be made commercially. Actually manufacturing methods must be devised by the individual manufacturer to fit his own specific formulae.

Another type of make-up base which has recently been introduced consists of even a higher ratio pigments, filler and oil than exists in the cake make-up which depend upon the use of a moist applicator for their efficacy. The newer type looks like the old compact face powder and is applied in the same manner. However, it has greater coverage and appears to be capable of application in a more uniform film. In this product the liquid base has been reduced to a point where it no longer binds the pigments in so cohesive a fashion that it becomes difficult to rub them off the main body of the cake with a puff. In other words, it has become a cross between the cake make-up and the compact face powder, retaining the rubbing off qualities of the face powder compact and having incorporated in it some of the qualities of the cake make-up. If it does not have all the characteristics of the cake make-up, it has an advantage in being able to lend itself to application without the need of a moist applicator, which is undeniably an advantage.

This product consists of the usual face powder formula, with perhaps an increased amount of titanium oxide with about 10 per cent to 15 per cent of mineral oil added and ground into it. The mass is then pressed as with compact powder.

Various types of make-up bases have been described without any attempt made to indicate which is the best. It is our own considered opinion that the best product is one which does what the user wants it to do. Since the users are varied in their desires, we feel that there is a market for all the types, and perhaps others not discussed in this paper.

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Broder Industries, Inc. 55
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Calco Chemical Division 74
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Carbide & Carbon Chemical Corp. ..... Insert bet. 24-25
Carr-Lowrey Glass Co. 46
Cavalla, Inc., A. 64
Chaleyer, Inc., Ph. 15
Chem-Arom Co., The 129
Chemical & Process Machinery Corp. 126
Chiris Co., Inc., Antoine 8
Coby Glass Products Company 62
Colton Co., Arthur 88
Consumers Import Co., Inc. 135
Continental Can Company 56
Crown Cork Specialty Corp. ..... Ins. bet. 56-57
Dallal & Co., D. S. 132
Danco, Inc., Gerard J. 103
Devold Oil Co., Inc., Peder 91
Diagraph-Bradley Stencil Machine Corp. 86
Dodge & Olcott, Inc. ..... Insert between 24, 25
Dodge Cork Co. 57
Dreyer, Inc., P. R. ..... Insert facing 92
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Dunkel & Co., Inc., Paul A. 94
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Fine Organics, Inc. 131
Firmenich & Co., Inc. ..... Insert facing 69
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Food Research Labs., Inc. 135
Foster-Forbes Glass Co. 61
Fritzsche Bros. ..... Insert between 108-109
Gardner-Richardson Co. ..... Insert facing 48
General Drug Co. 130
Givaudan-Delawanna, Inc. ..... Insert bet. 8-9; 98
Greeff & Co., R. W. 102
Gunning & Gunning 94
Hagerty Bros. & Co. 86
Harris Auction & Sales Co. 126
Hazel-Atlas Glass Company ..... Insert facing 76
Helfrich Labs., Inc. ..... Insert between 16-17
Hema Drug Co., Inc. 98
Herchelroth, J. Hilary 122
Heyden Chemical Corp. ..... Insert between 16-17
Hinde & Dauch Paper Co. ..... Insert between 56-57
Hoffmann-LaRoche, Inc. 110
Hooker Electrochemical Co. 14
Hormann & Co., F. R. 89
Horn, John 62
House of Hollywood 98
Huisking & Co., Inc., Chas. L. 91
Illinois Water Treatment Co. 77
Industrial Chemical Sales ..... Cover 2
Inland-Alkaloid Co. 102
Innis-Speiden Co. ..... Insert between 16-17
Interstate Color Co., Inc. 132
Intramed Co., Inc. 106
Ivers-Lee Company 65
Jelly & Co., Walter H. 116
Kachurin Drug Co. 90
Katz & Co., Dr. Alexander 17
Kelton Cosmetic Co. 118
Kessler Chemical Co. 95
Kimble Glass Co. ..... Insert facing 49
Knox Glass Associates, Inc. ..... Insert facing 81
Kohnstamm & Co., H. ..... Insert facing 104
Kolmar Labgratories ..... Insert facing 93
Koster Keunen Mfg. Co., Inc. 91
Kraft Foods Company 3
Lanatex Products Sales Co. 129
Lautier Fils 114
Lemke & Co., B. L. 127
Lueders & Co., George 6
Lusteroid Container Co. 60
Magnus, Mabee & Reynard, Inc. 66
Mallinckrodt Chemical Works ..... Insert facing 25
Mathieu, Inc., Charles 114
Merck & Co., Inc. 24
Metal Glass Products Co. 87
Michel & Company, Inc., M. 132
Monsanto Chemical Co. ..... Insert facing 4
Monsanto Plastics ..... Insert facing 65
Moutet, J. Henri 124
National Can Co. 54
Naugatuck Aromatics 10
Neumann, Buslee & Wolfe, Inc. 127
New England Collapsible Tube Co. 1
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N. Y. Quinine & Chemical Works 5
Norda Essential Oil & Chemical ..... Insert facing 96
Orbis Products Corp. ..... Insert between 8-9
Ozzyn Company 70
Palm Fechteler & Co. 64
Parento Co., Compagnie 19
Parson Imports, M. W. 90
Penick & Co., S. B. 9
Pennsylvania Glass Products Co., Inc. ..... Insert facing 57
Pennsylvania Refining Co. 94
Perl-Oussani Machine Mfg. Co. 88
Pfaltz & Bauer Co., Inc. 135
Pfizer & Co., Inc., Chas. ..... Cover 4
Pittsburgh Lectrodryer Corp. 82
Plaskon Division (Libbey-Owens-Ford) 59
Pneumatic Scale Corp., Ltd. ..... Insert facing 85
Polak's Frutal Works ..... Insert facing 5
Polak & Schwarz, Inc. ..... Insert facing 100
Potdevin Machine Co. 87
Powell & Co., Inc., John 95
Prentiss & Co., R. J. 119
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Progressive Machine Works 133
Randles Mfg. Co. 7
Reheis Company, Inc. 133
Richford Corp. 63
Robert, Inc., Henri 23
Robinson Wagner Co. 18
Rodgers Company, Inc., George G. 129
Ross Co., A. H. ..... Insert facing 80
Roure-Dupont, Inc. ..... Insert facing 105
Santonine Company of America, Inc. 91
Schimmel & Co., Inc. 13
Seeley & Co., Inc. 128
Seydel Chemical Co. 135
Shannon Industries, Inc. 87
Sheffield Farms Company, Inc. 20
Smith, Inc., George F. 133
Sonneborn Sons, Inc., Inc. 22
Standard Cap & Molding Co., Inc. 52
Standard Pharmacal Co. 106
Standard Specialty & Tube Co. 62
Stanton Laboratories 123
Stokes Machine Co., F. J. 78
Strong, Cobb & Co., Inc. 4
Sturge, Ltd., John & E. 21
Swindell Bros., Inc. 50
Synfleur Scientific Labs. ..... Insert facing 101
Thurston & Braidich 116
Tombarel Products Corp. 120
Torigian Laboratories, Inc. 135
Totus Mfg. Co., Inc. 98
Ungerer & Co., Inc. ..... Cover 3
Union Carbide & Carbon Corp. ..... Ins. bet. 24-25
U. S. Bottlers Machinery Co. 85
U. S. Industrial Chem. ..... Insert between 72-73
van Ameringen-Haebler, Inc. ..... Insert between 4-5
Vanderbilt Co., R. T. 106
Van Dyk & Co. ..... Insert facing 97
Verley & Co., Albert ..... Insert between 20-21
Vorac Company, The 131
Warner Brothers Co. ..... Insert facing 64
Welch, Holme & Clark, Inc. 125
Whittaker, Clark & Daniels, Inc. ..... Ins. bet. 12-13
Wigton-Abbott Corp. 64
Will & Baumer Candle Co. 116
Witco Chem. Co., Frank Setarate Div. 136
Wolf & Co., Jacques 103
Zimmerman Incorporated, W. F. 16

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